**Fire Safety Protocols / Strategy.**

**Fire strategy concepts**

What should be the fire strategy approach to each new building?

**An effective L1 fire alarm system systems installed throughout a building, to offer the earliest possible warning of fire and thus the longest possible time for all the occupants to escape**

What guidance should the design reference?

**The British Standard – BS5839 Part 1 covers the various aspects of the design process, divided into 22 sub-sections (8–29). It starts from the definition of the system category that is most appropriate for a particular building and its fire safety requirements and concludes with electrical safety. Each sub-section is presented in a clear and easy to follow format, with a general commentary on the particular design aspect being considered, followed by a list of recommendations. These recommendations typically refer to other, relevant British Standards.**

Should the building be provided with sprinklers?

**The buildings are not provided with sprinklers primarily due to the high value of plant and equipment within the buildings. To compensate this an L1 addressable fire alarm has been installed in most area along with fire doors and compartmentation. Some office areas are covered with an L2 system as there is no sleeping risk**

What should be the arrangements for fire detection and alarm?

**All areas have detection, however certain areas do have heat detectors fitted if there is a heat risk or a fumes risk eg Kitchens and boiler rooms. Pantries in Cardiac and surgical have a double knock system which on activation is two staged – initially to shut the door and place the system in pre-alarm – this is smoke based – the second stage is heat based.**

Should automatic fire detection be provided? If so, to what standard?

**An L1 standard is provided in all clinical areas and also in the majority of the non-clinical areas. Where this is not the case an L2 or L3 standard is provided.**

Should any fire detection and alarm system interface with existing systems?

**The fire alarm will interface with fire doors and fire dampers**

What should be the evacuation strategy**?**

**The evacuation strategy is progressive horizontal evacuation for clinical areas, to an adjacent clinical area where possible, and immediate evacuation of alerted areas in a continuous tone for non-clinical areas.**

**Persons in areas on intermittent tone should ready themselves for appropriate action should the area go into continuous tone**

**Should all building occupants evacuate immediately? See above**

Should the evacuation strategy support phased evacuation or progressive

horizontal evacuation?

**All clinical areas will support progressive horizontal evacuation techniques. Non clinical areas will adopt an immediate evacuation procedure for alarms in a continuous tone**

Should arrangements to limit external fire spread take account of potential future

development?

**Yes all combustible waste items are stored securely away from buildings. Fire breaks have been incorporated into the physical design of the buildings by way of courtyards**

Should the arrangements for fire-fighting access and/or water supplies consider

future development potential?

**Yes. It is essential that any future developments are within 18 metres of a water hydrant where possible**

**Fire risk assessments**

Who is responsible for providing fire risk assessments?

**The Trust Fire Safety Officer is the competent person for carrying out the fire risk assessments. This has been cascaded down via from the responsible person which is the Chief Executive**

Who carries out the risk assessment?

**The Trust Fire Safety Officer is the competent person for carrying out the fire risk assessments. This has been cascaded down via from the responsible person which is the Chief Executive**

How does the organisation ensure the competency of the fire risk assessor?

**The fire risk assessor should have relevant qualifications in fire related subjects and should also undertake CPD.**

What is the scope and what are the limitations of the risk assessment programme?

**The fire risk assessments are carried out as required by the fire service, currently they do not drive down far enough into each ward**

Is a survey of compartmentation included?

**The entire hospital has been surveyed and drawings have been placed on MICAD**

Will the risk assessment be limited by issues of access, asbestos etc?

**Only asbestos issues in the OPD basement area**

Who takes ownership of the fire risk assessment?

**The Fire Safety Officer has been delegated as the competent person**

Who initiates a review of the fire risk assessment?

**These are done as and when required**

Are reviews undertaken periodically? If so, at what period?

**Reviews are undertaken annually and also as circumstances dictate for instance when contractors are refurbishing an area**

Are reviews undertaken in response to material changes?

If so, how are these initiated?

**This is reliant on the Fire Safety Officer being informed by project managers that alterations are taking place – The Fire Officer is invited to attend pre construction meetings to voice opinions / offer advice**

How are changes to adjacent areas and departments considered?

Are temporary changes to be reflected in the fire risk assessments?

**All temporary changes are reflected in the risk assessment and are recorded and distributed to staff**

How is the introduction of hot works to an area that may invalidate the fire risk

assessment during the period of the works considered?

**A contractor safe system of work is required with will list a method statement, risk assessment which will include isolations and fire watches, plus other controls required**

How is the degradation of the fire detection and alarm system considered?

**The system is serviced and maintained every year. Faulty devices are also replaced as and when required. The current Madewel system which is operational in only a couple of areas is being replaced as funds allow.**

How are temporary changes to adjacent areas and departments considered?

**They are risk assessed and staff are informed**

How are the findings of the fire risk assessment communicated?

**Individual risk assessments are placed on the S drive these will soon be placed in a manual for all areas**

How are findings communicated to employees?

**As above in the manuals plus in training sessions**

How are the findings of other employers’ risk assessments communicated to the organisation and accounted for in their risk assessments? **All contractors are asked to provide Method Statements and risk assessments prior to starting any job on site**

**Fire prevention**

What steps should staff take to prevent the occurrence of fire?

**Basic good housekeeping is the key objective, plus observing the simple fire triangle strategy**

How are sources of ignition controlled?

**Portable appliance testing is carried out regularly**

**Periodic testing on the hard wiring is timetabled in. Poor electrical installations, e.g. Overloads, heating from bunched cables, damaged cable;**

**Gas appliances are serviced 6 monthly**

**Smoking is banned in all areas**

**Naked flames, e.g. gas or liquid-fuelled open-flame equipment; there is a slam shut on gas appliances**

**Sparks from burning products, - no fires**

**Electrical convector heaters are banned on site**

**Electrical, gas or oil-fired heaters (fixed or portable), room heaters;**

**Hot processes/hot work, e.g. Welding by contractors is only allowed within controlled environments**

**Cooking equipment, hot ducting, flues and filters are cleaned regularly**

**Extract fans for dust and fume removal systems, e.g. By build-up of debris;**

**Failure of temperature control thermostats on hot work/cooking processes – regular services are performed**

**Heat sources, such as gas, electric, microwaves, radio frequency, thermal fluids;**

**Frictional generated heat from mechanical equipment;**

**Static charge from mechanical equipment,**

**Faulty or misused electrical equipment, e.g. Toasters**

**Light fittings and lighting equipment, e.g. Halogen lamps are being replaced with led lamps**

**Hot surfaces and obstruction of equipment ventilation**

**Spontaneous ignition and self-heating, e.g. Oil soaked rags are stored externally in a secured bin**

**Arson.**

How are combustible materials and flammables controlled?

**They are stored in fire resistant rooms**

How are sources of oxygen and oxidising agents controlled?

**They are mainly stored in fire resistant rooms however as an hospital it is expected that oxygen will be present in most clinical areas**

What facilities are in place to assist in the prevention of fire?

**Regular training plus inspections**

What action should staff take to prevent arson?

**Good housekeeping plus report suspicious persons**

**Fire detection and alarm systems**

Is there a standard type used in the organisations? If so, what are the details of the

system used?

**A Gent Vigilon system**

What arrangements are there for the system maintenance and testing?

**Regular maintenance is carried out by competent contractors who test all functions of the system at that time plus the system is tested in various locations across the hospital on a weekly basis**

What arrangements are there for a degradation of the system’s performance?

**The system is self-monitoring with a WINMAG system and faults are shown on screen. The system is monitored by Estates staff and repairs are initiated as required A formal arrangement is required**

What arrangements are there for disabling part or all of the system to facilitate works, cleaning activity etc?

**A timed isolation permit system is in place in Estates**

How are building occupants notified? How do the fire risk assessments

reflect the potential impact?

What arrangements are there for undertaking work on the system?

**A timed isolation permit system is in place in Estates**

**False alarms and unwanted fire signals**

What actions should staff take to avoid false alarms?

**Good housekeeping, safety training, correct use of toasters and microwaves and aerosols**

What actions should staff take to prevent false alarms becoming unwanted fire signals?

**This is monitored by the Estates Fire Response team who will initiate a four minute call challenge on every unconfirmed fire alarm activation**

What actions should staff take to minimise the disruption caused by false alarms and

unwanted fire signals?

 **Good housekeeping, safety training, correct use of toasters and microwaves and aerosols**

How should false alarms and unwanted fire signals be recorded and reported?

**These are recorded internally in a log book as they occur they are then placed on a reporting matrix which is issued to Director level on a monthly basis**

**Fire extinguishers**

What type of fire extinguishers are used in the organisation?

**As a rule Carbon dioxide and foam extinguishers are used . Wek chemical are available in the main kitchen and powder are available in planr rooms these area however being phased out**

How should they be used?

**Extinguishers should only be used if life is threatened or if staff are trained**

Are there typical locations? If so, where are fire extinguishers likely to be located?

**Usually in areas where there are relevant hazards and also at final exits**

What are the arrangements for their servicing and maintenance?

**Extinguishers are serviced / maintained on an annual basis by competent contractors**

Who should be trained in their use?

**The fire response team plus Estates persons working in hazardous areas**

**Portable appliance testing**

What equipment needs to be subject to portable appliance testing?

**All electrical portable appliances**

Does new equipment require testing in its first year of use?

**New appliances should be tested at the next visit by the PAT Tester**

What frequency should appliances be subject to testing?

**This is dependent on the appliance according to the Trust procedure**

How should portable appliance testing be indicated on the equipment?

**A pass or fail adhesive certificate**

How should portable appliance testing be recorded?

**It is recorded electronically**

**Purchasing**

What fire safety standards should apply to upholstered furniture being procured?

[**The Furniture and Furnishings (Fire) (Safety) Regulations 1988**](http://www.legislation.gov.uk/uksi/1988/1324/contents/made)

What fire safety standards should apply to textiles and furnishings being procured?

**BS 5867-2:2008 – ‘Fabrics for curtains, drapes and window blinds – Part 2: Flammability requirements – Specification’ sets out levels of performance based on testing to particular methods.**

Is there a list of items that should not be purchased without first consulting with the Fire Safety Manager or Fire Safety Adviser?

**Items are mentioned throughout this document however no designated list exists**

What procedure should be followed to obtain advice for the purchase of items that may pose a fire hazard?

**None Available**

**Laundry**

What laundry processes should be used to preserve the fire retardancy of textiles?

What labelling should be used on textiles to identify their fire retardancy properties?

* **All laundry is washed to the standard stated in the CFPP 01-04 (Decontamination of linen for health and social care).**
* **Labelling is on the relevant textiles to identify their fire retardancy properties**

**Security**

Does the fire risk assessment take account of the lockdown policy and process? **Yes in high security areas such as neo-natal unit failing to safe detents on firedoors are considered**

Does the emergency evacuation plan work during a lockdown? **Yes and this is tested annually with assistance from the emergency planning officer**

What are the procedures for lockdown which can assist with the management of a fire incident?

**Refer to Emergency Planning Officer**

**Maintenance of fire precautions and systems**

What procedures should be followed for the maintenance of fire systems?

**No procedure just a specification for maintaining the system**

What should be the maintenance intervals for each system or element of the fire precautions?

**Usually systems are tested on an annual basis**

What arrangements are there for a degradation of the fire precautions or system during maintenance activity?

**Any defects will be replaced as required – Formal arrangement required**

**Construction, refurbishment and other works**

What are the procedures for ensuring that project works do not compromise fire safety?

**All works are delegated to appointed / responsible persons within the Estates infrastructure**

Is there a process of consultation with the Fire Safety Manager and/or Fire Safety Adviser?

**Only one role in place**

Is there a permit-to-work system in place for any works that may penetrate a fire-resisting structure?

**Yes within Estates**

Is there a permit-to-work system in place for any works that may obstruct access or a fire escape route?

**Yes within Estates**

Is there a permit-to-work system in place for any works that may affect facilities for the fire and rescue service such as access routes, fire appliance hardstanding, fire hydrants, fire mains etc?

**All works are delegated to appointed / responsible persons within the Estates infrastructure and permits are issued if any process affects the facilities within Estates**

How are building occupants notified about the potential impact reflected in the fire emergency action plan?

**Verbally informed**

How are project records collated and changes reflected in the information provided to the fire and rescue service?

**Health and Safety files are collated**

**Fire stopping**

What are the procedures for fire stopping?

**All contractors are informed that they should fire stop all areas that come under their remit and provide evidence**

What is the specification for fire stopping? **Third party accredited installers (FIRAS)**

What are the requirements for product certification?

**Hilti Fire stop products trained installer**

What are the requirements for fire stopping contractor certification? **Third party accredited installers (FIRAS)**

How are the details of fire stopping recorded?

**Certificate of Conformity plus location photos**

Are details of location, product type and quantity, date of installation, contractor’s

details and batch numbers recorded?

**Yes and held digitally**

Are details identified locally on the fire resisting element to which the fire stopping is applied and records collated centrally?

**Labels attached and recorded on the contractors database**

Is the application of fire stopping inspected prior to the completion of works and the closing of ceilings etc?

**Fire Officer inspects all intrusive works on a permit system**

If so, who carries out the inspection?

**Fire Officer inspects all intrusive works on a permit system**

How is the inspection recorded?

**Fire Officer records this on an intrusive works permit – plus receives a certificate from the contractor plus inspects the area**

Hot works

What are the procedures for hot works?

**A hot works permit system is in place**

Who is responsible for undertaking the risk assessment associated with the hot works?

**The principle contractor will create the risk assessment and method statement which must be forwarded to the project manager / client**

How do the fire risk assessments reflect the potential impact particularly for adjacent or associated areas?

**Adjacent areas would go into intermittent alert, however they have a minimum of a 30 minutes safety period to identify the requirement to evacuate**

How are building occupants notified and how is the potential impact reflected in the fire emergency action plan?

**All adjacent areas are informed verbally if hot works are being undertaken**

**Security**

What procedures should be followed to ensure that security arrangements do not compromise means of escape?

**The PAC lock system is interfaced to fail to save on the fire alarm system activating plus there are green emergency override push buttons to operate**

Where electronic or magnetic locking devices are in use, what are the arrangements for overriding the locking mechanisms in the event of a fire?

**The electronic locks and magnetic locks are all interfaced to the fire alarm system and if they are in the vicinity of the fire alarm continuous tone they will fail to safe**

What are the arrangements for avoiding the unintentional operation of manual call points by persons intending to activate the door lock controls?

**The manual call points all have plastic covers on to protect them from accidental activation**

How do the security measures for protecting vulnerable patients interact with the means of escape?

**The door activation control buttons have disabled in some areas in order to keep patients secure. The MCPs are still active**

Is the escape from some areas reliant on the staff to unlock doors?

**Not in the event of a fire alarm activation**

How do security arrangements external to the building impact on the ability of those

evacuating to move away from the building to a place of safety?

**Not Applicable**

**Fire emergency action plans**

Who is responsible for developing the fire emergency action plans?

**Fire Safety Officer along with Emergency planning staff**

How are action plans coordinated between different departments

**Scheduled in via Estates**

How are the fire emergency action plans communicated to staff and other relevant

persons?

**Via the area management to cascade at team meetings**

Who initiates a review of the fire emergency action plan?

**The Fire Officer**

Are reviews undertaken periodically?

**Annually or if material factors change**

If so, at what period?

**Annually or if material factors change**

Are reviews undertaken in response to material changes?

**Annually or if material factors change**

If so, how are these initiated?

How are changes to adjacent areas and departments considered?

Are temporary changes to be reflected in the fire emergency action plans?

How is the degradation of the fire detection and alarm system considered?

**The alarm system is tested and serviced at least annually and any problems are dealt with at that time**

How are temporary changes to adjacent areas and departments considered?

How are these temporary changes communicated to staff?

**Verbally through managers**

How should the fire emergency action plans be rehearsed?

**Fire drills are carried out on a regular basis in related area**

How often should the rehearsal take place?

**Annually**

**Fire safety information manual**

What arrangements are in place to provide fire safety information manuals?

**Currently a Master Template Manual is being compiled from which all other areas will have one written specific to their area**

What form should the fire safety information manual take and what should it contain?

**Refer to BS 9999**

Who is responsible for ensuring that the fire safety information manual is maintained up-to date?

**Fire Officer**

What are the arrangements for ensuring that the fire safety information manual is available to staff members, patients and patient representatives?

**All areas will eventually have the full manual target date for completion is 1/1/2016**

Who initiates a review of the fire safety information manual?

**The Trust Fire Officer**

Are reviews undertaken periodically? If so, at what period?

**They are reviewed as issues become relevant**

Are reviews undertaken in response to material changes? If so, how are these

initiated?

**Through Estates works schedules**

**Fire safety training**

What arrangements are in place to provide fire safety training?

**Face to face plus workbooks and also online sessions are available**

Do these arrangements include training for volunteers and/or employees of other

organisations that work within the premises?

**Yes they are all offered access to the sessions**

How is the training needs analysis communicated to staff?

**All staff simply have to undertake annual fire safety awareness training**

How do those requiring training arrange to receive the appropriate fire safety training?

**Timetables are available or workbooks on the intranet**

What are the training arrangements for temporary, agency and/or bank staff?

**All attend local training as a minimum**

What are the arrangements for recording attendances at fire safety training sessions

**Register are signed by the attendees**

How is the responsibility for ensuring staff members are made available for fire safety training communicated to line managers?

**It is part of the annual appraisal system**

How is the effectiveness of fire safety training audited?

**Fire Drills**

Information for the fire and rescue service

**The Fire and Rescue have been notified of all hazards on site, all access routes all hydrants and risers.**

How is the fire and rescue service engaged in the process to ensure that sufficient information is available in a usable format?

**Regular communication is established**

Where is the package of information located, and how is it delivered to the attending fire and rescue service?

**It has already been given electronically**

What process is in place for reviewing and updating the information available to the fire and rescue service?

**All information is forwarded to the Fire and Rescue Safety Officer by email or Pen drive on a regular basis**

**Medical gases**

What procedures are necessary for the safe use of medical gases?

**Competent contractors are employed**

How should medical gas cylinders be stored?

**In the main the gas cylinders are secured in a vertical position methods of the securing are varied and depends on the area**

Where should medical gas cylinders be stored?

**Usually they are stored in well ventilated areas away from heat sources**

How many medical gas cylinders should be stored in any central location?

**Cylinders should ideally be stored undercover in a secure, dry and well ventilated area and they should not be stored near to combustible materials. E or D sized cylinders can be stored in the horizontal position but F and larger must be stored upright, secured in racks or with chain across the cylinder bank to prevent toppling**

**The floor should be level and constructed of concrete or other non-combustible material. The store should have adequate means of access – preferable level – to facilitate delivery and collection of cylinders. So far as practicable, lighting and electrical equipment should be sited in a safe position, remote from cylinder storage. Lubricants should be avoided. Only lubricants that are made for oxygen service and specified by the equipment supplier should be used. Always use clean hands or gloves when assembling oxygen equipment i.e. when changing cylinders. Check that hands are free from oil or grease before handling equipment. Separate empty, full and faulty cylinders. Never repaint, obscure or alter the marking on cylinders. The storage area should be clearly identified i.e. by use of appropriate signage. This can take several forms. Internal surgery doors and cylinder storage areas to be identified with a green compressed gas diamond and yellow oxidising warning triangle. External cylinder storage areas should carry more robust signage i.e. Compressed Gases / No Smoking / Oxidising Substance / Contact Information - all according to requirements under HTM 02-01**

**Salvage and continuity planning – Additional**

Who is responsible for developing the salvage plans and continuity plan?

How are salvage and continuity plans coordinated between different departments and different organisational levels?

How is the salvage and continuity plan made available to the fire and rescue service when they attend?

Who initiates a review of the salvage plan and continuity plan?

Are reviews undertaken periodically?

 If so, at what period?

Are reviews undertaken in response to material changes?

If so, how are these initiated?