The Bishop Konstant Catholic Academy Trust

Learning Communities, Inspired by Faith

Trust Fire Safety Policy 2021

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Mission Statement

All policies are written in line with our Trust Mission statement:

With Jesus Christ at the centre of the life of the Trust, we seek to provide learning communities offering the highest possible standards of education. We are committed to working in partnership and trust for the common good. We strive to encourage and empower children and young people to recognise and realise their God-given potential and to discern their vocation in life. As learning communities inspired by faith, we celebrate achievement, offering each other challenge and support, as together we follow Christ in self-giving love and service.

Change Control

Version	*Date*	*Author*	*Changes*
1.2			
1.1			
1.0			

Contents

1. Policy Statement

The Bishop Konstant Catholic Academy Trust (referred to thereafter as the Trust) recognises that fire precautions play an important part in the health and safety of staff, pupils and other persons on its premises, and is therefore committed to minimising the risk of fire within its premises to the lowest practicable level.

The Trust will comply with the Regulatory Reform (Fire Safety) Order 2005, and any other relevant fire safety legislation, as far as is reasonably practicable.

In the event of a fire, the Trust seeks to provide an effective response through rapid detection, containment and control. This will be achieved, in part, through staff training and awareness as it is recognised that everyone can contribute to the prevention of fire and through a responsible reaction, mitigate the spread of fire and ensure a safe evacuation.

2. Introduction

2.1 Background

The Trust has an estate that includes 15 school sites across the Wakefield, Leeds, East Riding and North Yorkshire local authority districts comprising 3 secondary and 12 primary schools at present.

As a result of legislative changes in 2005, the duty to plan, organise, control, monitor and review preventive and protective measures aimed at preserving life in the event of fire, rests with the responsible person.

In the case of the Trust this is acknowledged corporately as being the Board of Trustees and the Chief Executive Officer, with responsibility vested locally in the Head Teacher/Head of School, plus those having responsibility on a day to day basis such as Premises Managers/Caretakers.

Core within the relevant legislation is life safety, with the provision of adequate means of escape and means for giving warning in the event of fire being key components of the suite of measures aimed at securing that goal. It is recognised that through the provision of effective and appropriate measures aimed at preserving life, there are benefits to be derived in relation to business continuity through property protection and maintenance.

The Trust takes its responsibilities seriously and continues to invest in measures aimed at improving fire safety and reducing risk across the estate.

This policy document has been produced in order to set out the Trust's fire safety standards and requirements that will be applied across the estate to secure improvements to fire safety provision in existing premises within the estate, as well as support the ongoing management of those provisions.

It will also provide a benchmark against which all new buildings and major refurbishments can be measured against; in addition to those regulatory requirements associated with new building work and major refurbishment schemes, such as the Approved Documents underpinning the Building Regulations.

The policy considers both the legislative requirements placed on the Trust, together with those aspects aimed at risk reduction. The detail within this document is intended to provide the Trust with information aimed at securing those objectives and should be considered as a series of requirements as opposed to 'nice to have' aspirations. In applying the detail provided within this policy the Trust can not only deliver a consistent set of fire safety measures estate-wide, but can also avoid unnecessary, and potentially wasted financial outlay.

The Trust recognises the risk posed by fire. The varied building types across the estate have been upgraded and altered over time. As such, there are elements that do not meet the exact requirements of the current Building Regulations and associated Approved Documents. Even in newer buildings it is not always possible to reference original designs, strategies and approvals to identify how the functional requirements of the Regulations in place at the time of the build were specified and met.

The effective management of fire safety starts at the initial design and continues throughout the whole life of a building. The purpose of this document is to provide guidance to those involved in the planning, organisation, control, monitoring and review of both preventive and protective fire safety measures provided within the Trust. Designers, project managers and contractors working on behalf of the Trust should also follow the guidance set out in this Policy.

The Regulatory Reform (Fire Safety) Order 2005 (the Order) places a duty on the 'responsible person' to take such general fire precautions to ensure, so far as reasonably practicable, the safety of his employees and other relevant persons as may reasonably be required, and to identify the need for preventative and protective measures as described in the Order. Article 11 of the Order requires that:

"The responsible person must make and give effect to such arrangements as are appropriate, having regard to the size of his undertaking and the nature of its activities, for the effective planning, organisation, control, monitoring and review of the preventive and protective measures".

Planning, organisation, control, monitoring and review arrangements in large premises require a regular audit of fire safety measures, and routine review of the fire risk assessment. In order to understand the basic framework of the fire precautions in a building it is necessary to understand the fire strategy that was set out when the building was constructed.

This Policy is intended to provide an overarching document setting out the base fire safety features that any ongoing assessment of risk can be assessed against, reducing the need to go back to first principles when a new aspect of fire safety and fire protection provisions are required. It is to be used to supplement the requirements of the Building Regulations for new buildings and refurbishments, which are a set of minimum standards that only apply to new buildings or to work that is defined as "material change of use or material alteration". It may also be used in minor works.

The effectiveness of this Policy depends not only on physical precautions and protection measures designed to prevent the occurrence and spread of fire, but also on the co-operation of every member of staff, pupil, visitor and contractor.

This document is intended to set out the Trust's fire safety standards and requirements to be applied across the estate to secure improvements to fire safety provision in existing premises within the estate, as well as support the ongoing management of those provisions.

2.3 Scope

The creation of a Trust Fire Safety Policy document is to be used to set the standard for fire safety management across the estate. The document is intended to detail the Trust requirements for all elements of fire safety and set a minimum standard to be achieved on each building. This will include organisation structure, training, passive fire protection, active fire protection and management measures to ensure the fire risks in each building can be correctly detailed, implemented and managed.

This Policy applies to all Trust schools. It also applies to the Trust Central Office and the use of other permanent or temporary buildings subject to confirmation. The Policy is intended to address both legislative requirements for fire safety management as well as risk reduction.

It is intended to ensure a consistent application, and to identify the Trust's desired approach when the proposed use and ongoing building management requirements necessitate a variation from prescriptive standards.

The guide is intended to facilitate high standards of fire safety design and application, and secure best value and sustainability in relation to the design and use of Trust premises. It is important to recognise that Trust premises are occupied and used by a variety of people with different requirements, and is not limited to pupils, teaching and other staff.

The effective application of fire safety design and management principles should not be considered in isolation and this document should therefore be viewed alongside other relevant Trust policies, guides and standards relating to the Management of Health and Safety, Equalities, Procurement, Environmental Protection, and Quality Management.

The most recent versions of relevant standards, reference documents and policies are to be referred to when undertaking any new build or refurbishment project.

This is limited by the fact that the current Trust offices are a demised unit within a multi-occupied building and therefore only certain elements of fire safety are within the Trust's control. In accordance with the Order, the Trust will co-operate with the Diocese, as legal owner of the buildings in relation to fire safety measures and management requirements.

2.4 Aims/Objectives

This Trust Fire Safety Policy provides the guiding principles for fire safety management across the Trust estate. The emphasis of the Trust Fire Safety Policy shall be on early detection and evacuation for the protection of life. The protection of property is of high importance to the Trust, with business continuity and the environment taken into consideration.

The strategic fire safety aims of the Trust are:

- For the Trust estate to be fully compliant with applicable UK fire safety legislation as soon as reasonably practicable.
- To ensure reasonable and appropriate standards of fire safety for staff, pupils, contractors and visitors.
- To reduce the incidence of fires.
- To protect the Trust estate against the effects of fire.
- To minimise the potential impact of fire on business continuity.
- To minimise the environmental impact of a fire.
- To provide sufficient guidance and training to staff to undertake their roles.
- To align the requirements of the Building Regulations, Fire Safety legislation and Trust policies.
- To provide an indication of non-prescriptive preferred solutions and appropriate standards.
- To facilitate high standards, best value and sustainability in terms of fire related issues in the design and use of buildings.

In order to secure those aims, the Trust has a series of objectives intended to address three key elements of fire safety management, namely: **prevention, protection and intervention measures.**

2.5 Consultation/Communication

The Trust is determined to ensure that internal and external communications and consultation processes relevant to this Policy are effective.

Comprehensive communication between the Trust, senior leaders and fire safety and other advisors is key to achieving good cost-effective fire safety standards, compliant with relevant legislation. Roles and responsibilities are outlined in the Policy document.

Stakeholders and end users should be involved in all new build or refurbishment proposals.

Headteachers must liaise with Trust senior leaders prior to the commencement of work in order to enable the most suitable approach to be selected, and to ensure consistency in the application of the most suitable methodologies to secure the desired solution.

In relation to new projects the local Fire Authority, Building Control Officer or Approved Inspector, Principal Contractor and other relevant persons shall be consulted on a regular basis throughout, in an open transparent manner.

3. Legislative Requirements

The following references to relevant legislation or guides are not intended to be exhaustive, but to provide an indication of the range of requirements that need to be taken into account when approaching fire safety design and management. The Trust will comply with all relevant legislation relating to the design and build of its premises, and to ensure that an appropriate and broadly acceptable standard of fire safety management is adopted, the guidance described in this document takes into consideration the requirements and recommendations contained in the following documents.

3.1 The Regulatory Reform (Fire Safety) Order 2005

The Trust's premises are subject to the provisions of the Regulatory Reform (Fire Safety) Order 2005 (referred to hereafter as the Order), and the fire risk assessment regime required under this legislation.

The Order places a duty on the 'responsible person' to take such general fire precautions to ensure, so far as reasonably practicable, the safety of his employees and other relevant persons as may reasonably be required, and to identify the need for preventative and protective measures as described in the Order. Article 11 of the Order requires that:

"The responsible person must make and give effect to such arrangements as are appropriate, having regard to the size of his undertaking and the nature of its activities, for the effective planning, organisation, control, monitoring and review of the preventive and protective measures".

This requires that the responsible person for all non-domestic premises provides the minimum fire safety standard. The responsible person is required to ensure that specified fire safety duties, which include ensuring the general fire precautions are satisfactory, and to conduct a fire risk assessment.

Article 22 of the Order, states that where more than one responsible person shares, or has duties in respect of a premises (whether on a temporary or a permanent basis), each must take all reasonable steps to co-operate and co-ordinate with the others in relation to the measures they take must inform the others of the risks to relevant persons arising out of the conduct of their undertaking.

3.2 Building Regulations 2010

The purpose of the Building Regulations and its guidance document - Approved Document B: Fire safety (Volume 2) - Buildings other than dwellings, 2019 edition is to provide guidance on the fire safety requirements for the completed building.

The Regulations apply to all new buildings and to any material alterations to existing buildings, which is defined by reference to a list of "relevant requirements" within Schedule 1 to the Building Regulations. When work is completed the building as a whole must comply with the relevant requirements of Schedule 1, or where it did not comply before, must be no less satisfactory than it was before the work was carried out in relation to compliance with the requirements for:

- Provisions for early warning of fire
- Appropriate means of escape
- Compartmentation
- Internal and External fire spread
- Access and facilities for the Fire and Rescue Service

The objective of the Building Regulations in relation to fire are that:

- All persons in a building should be able to leave the building safely in the event of fire
- Fire Service personnel should be able to enter the building to effect rescue and firefighting are not placed at undue risk
- Fire spread to adjacent buildings should be controlled
- The building should not undergo untimely or disproportional collapse that endangers firefighters or people in and around the building.

As recognised within the Building Regulations, the "design of means of escape and the provision of other fire safety measures such as a fire alarm system should be based on an assessment of the risk to the occupants should a fire occur. The assessment should take into account the nature of the building structure, the use of the building, the processes undertaken and/or material stored in the building; the potential sources of fire; the potential of fire spread throughout the building; and the standard of fire safety management proposed".

Approved Document B (ADB) recognises that in order to satisfy the requirements of the Building Regulations there are alternative approaches that can be applied. For example, the solutions that can be found in appropriate British Standards such as BS 9999, which allow a risk-based approach to be applied to fire safety design. This document is cited in the guidance to ADB where it is either referenced in ADB or where it contains detailed design guidance that is not covered in ADB.

3.3 Building Bulletin 100

Building Bulletin 100 provides guidance on fire safety in schools. Part B of the Building Regulations will typically be satisfied where this guidance is followed.

3.4 The Construction (Design and Management) Regulations 2015

If building works are carried out it is important that the risk from fire is assessed and appropriate protective and preventative measures implemented. Appropriate fire risk assessments are required by both the Order and The Construction (Design and Management) Regulations 2015. It is important that these fire risk assessments and their associated emergency plans dovetail with the fire risk assessments and emergency planning for the existing premises.

3.5 Insurance Companies

It should be recognised that insurers may require works to be undertaken in order that the building owner ensures an adequate standard of risk management throughout the life of the premises which may go beyond the requirements of the Building Regulations.

3.6 Equality Act 2010

The Building Regulations are intended to secure a reasonable standard of health and safety for persons in an about buildings, and is intended to include all people, including those with disabilities. In addition to any requirements imposed by Building Regulations Part M, there will also be obligations under the Disability Discrimination Act 1995.

3.7 Heritage and Listing

Historic buildings present particular challenges, as many are listed and permitted material alterations are therefore limited without the agreement of the appropriate authorities.

3.8 Sector Specific Guidance

Reference should also be made to relevant sector specific guidance for the design and management of fire safety in schools covering locations or activities undertaken e.g. Health and Safety Executive (HSE) and the Consortium of Local Education Authorities for the Provision of Science Services (CLEAPPS).

4. Roles and Responsibilities

4.1 The Trust Board

The Trust Board has a corporate responsibility for ensuring that the Trust fulfils all legal responsibilities in respect of health and safety. This specifically includes ensuring that:

- There is an up to date and effective policy for health and safety management across the Trust which is supplemented by underpinning policies and procedures as appropriate.
- Our employer responsibilities are met, through the appointment of a Competent Person to provide professional advice on health and safety matters.
- There are arrangements in place to consult employees about the risks at work and current preventative and protective measures.
- There are arrangements in place to assess risks to pupils, employees, visitors and contractors who could be affected by their activities.
- All employees are given appropriate information and training to enable them to understand and fulfil their responsibilities with regard to health and safety.
- Funds are allocated appropriately to meet the requirements of this Policy and relevant legislation.
- Notification and reporting procedures to the relevant statutory authorities are carried out.
- External independent health and safety reviews are undertaken on a periodic basis to supplement internal reviews.
- Health and safety matters are a standing agenda at all Trust Board meetings.

All Trustees will be committed to setting a personal example on all matters of health and safety and promoting a positive health and safety culture across the Trust.

4.2 The Chief Executive Officer (CEO)

The Chief Executive Officer is responsible for ensuring that the duties of the Trust Board are met and that all organisational responsibilities and arrangements as set out in this Policy are communicated, implemented and maintained. The CEO has overall responsibility for the day to day management of health and safety within the Trust Central Offices.

4.3 The Headteacher/Head of School

The Headteacher/Head of School has the overall responsibility for the day to day management of fires safety and health and safety within their academy. They may delegate functions and responsibilities in respect of fire safety and health and safety matters to other employees within their academy. This includes:

- Implementing the Trust Health and Safety Policy and associated procedures, ensuring that it is regularly reviewed and adhered to.
- Monitoring fire safety and health and safety matters in their academy and provide information to the Trust and their Academy Council as required.
- Ensuring that effective fire safety and health and safety management procedures are in place for carrying out regular inspections and risk assessments, maintaining appropriate records, implementing appropriate control measures or actions where necessary and providing information to employees and the Trust as appropriate.
- Ensuring that effective management procedures are in place for emergency situations, for example, in the event of a fire or security breach.
- Ensuring that all employees within their academy receive the necessary fire safety and health and safety information, instruction, training and supervision to undertake their roles and responsibilities safely. Employees must have access to policies that apply to them within the academy.
- Ensuring that pupils, visitors and contractors understand and follow policy and procedures which apply to them.
- Informing the Chief Executive Officer or designated Trust Central Team Manager of all matters relating to serious breaches of policy including any major incident to be addressed under this Policy.
- Ensuring that health and safety investigations are carried out where necessary and implementing actions required to eliminate/reduce future risks to health and safety.
- Ensuring that the advice of the Competent Person or the Trust is acted upon.
- Ensuring appropriate and reasonable adjustments are made to provide for fire safety and health and safety of employees who may have temporary or permanent impairment, meaning they require additional support or reasonable adjustments.

4.4 Competent Person(s)

The Trust appointed Competent Person is suitably qualified and experienced to advise the Trust and individual academies on all matters in respect of fire safety and health and safety.

This includes:

- Leading on the development and maintenance of Trust wide and academy specific fire safety and health and safety policy and procedures.

- Leading on establishing procedures and monitoring arrangements for conducting and implementing routine fire safety and health and safety activities as required.
- Ensuring that procedures are in place or implemented and that periodic checks are made on the adherence to the agreed procedures, to ensure that records are maintained and updated to meet the requirements set out in the relevant health and safety legislation and regulations.
- Advising the Trust on the implications of new or changing fire safety and health and safety legislation and make recommendations accordingly.
- Contributing to the development, implementation and ongoing maintenance and monitoring of fire safety plans and health and safety action plans providing regular updates to the Headteacher and the Trust.
- Supporting Headteachers/managers to maintain safe systems of work; implementing best practice and providing specialist advice, coaching and practical support as required.
- Assisting Headteachers/managers in implementing fire safety and health and safety systems and procedures to meet specific requirements.
- Access professional support and guidance from other relevant organisations and external sources as necessary.

4.5 All Employees

All employees of the Trust have a responsibility to take due care of their own health and safety along with that of others whilst at work.

All employees of the Trust will act responsibly to ensure that they:

- Understand and comply with the Trust Health and Safety Policy and Procedures and associated policy and procedures at all times.
- Co-operate with the Trust and individual academy management on all matters relating to fire safety and health and safety.
- Immediately report any concerns or issues in the interests of fire safety and health and safety to their line manager (e.g. equipment/premises defects; policy or procedure failures) in accordance with procedures.
- Do not misuse anything that has been provided for fire safety and health and safety purposes.
- Encourage pupils to follow safe practices and observe safety rules.

4.6 Visitors and Contractors

The Trust recognises its responsibility for the actions and safety of visitors and contractors on its premises. Visitors must be escorted at all times and must not be placed at risk when conducting their business in any of the Trust/academy premises.

All contractors are required to read, understand and comply with the fire safety and health and safety procedures (including emergency procedures) and with the Trust Contractors' Code of Conduct at each Trust/academy premise; all contractors and any of their sub-contractors involved will agree the risk assessment and safe systems of work to be used prior to any works commencing on a Trust/academy premise.

4.7 Pupils

All pupils must be encouraged to follow safe practices:

- To follow instructions by a member of staff in case of an emergency.
- To not intentionally interfere with safety equipment, e.g. fire extinguishers and fire alarms.
- To inform a member of staff of any situation, which may affect their safety or that of another pupil.

5. Design Strategy

The Trust's core design strategy is based on the early detection and warning of fire in order to preserve life by facilitating speedy evacuation from its premises.

The Building Regulations state that the *"design of means of escape and the provision of other fire safety measures such as a fire alarm system should be based on an assessment of the risk to the occupants should a fire occur. The assessment should take into account the nature of the building structure, the use of the building, the processes undertaken and/or material stored in the building; the potential sources of fire; the potential of fire spread throughout the building; and the standard of fire safety management proposed".*

The Trust estate comprises buildings that range in age and type with a combination of original features and various alterations in place. As such, it is recognised that any fire safety strategy is based on the 'as-is', and capital schemes for improvement is tempered by both opportunity and funding. In relation to the existing estate, any scheme of improvement will be based on priorities established through risk assessment, against a benchmark of what is reasonably practicable, with the aim of securing maximum long-term improvement from investment.

New Trust premises and those undergoing major refurbishment will be required to satisfy the principle that the extent of fire and smoke damage will be minimised and confined as close as possible to the point of fire origin.

For the purpose of the Trust Fire Safety Policy, as recognised within the building regulations and British Standards, fires do not normally start in two different places within a building at the same time, and are more likely to occur in occupied space rather than escape routes. It is also recognised that whilst security measures intended to safeguard staff and pupils by

restricting access to sites and individual buildings, there is a limit to the extent to which deliberate fire setting (including multiple seats of fire and the use of accelerants) can be prevented.

Compliance with Approved Codes of Practice is expected where practical however, BS 9999 and Fire Engineering solutions may be used where beneficial. Any variation from simple compliance with Approved Codes of Practice will require full explanation in the building Fire Strategy including any implications for future changes in design or use.

It is important to ensure that the design of any future development or refurbishment fully considers the practical requirements of users including those responsible for planned and preventative maintenance, and the through-life requirements of the building. The future design strategy shall also address the fire related challenges present within educational buildings, including:

- Multi use buildings often with content of national or historic importance
- Common changes of use of space e.g.IT, electrical equipment, telephone lines, etc. frequently added to or changed, breaching fire compartmentation
- Extensive range of users including but not exclusively issues associated with disabilities, ages cultures and religions, some users having limited appreciation of fire safety, and often unfamiliar with the building
- Frequent door wedging and use of corridors and common areas for displays etc. with no clear understanding of fire loading restrictions
- Increasing use of headphones, resulting in not hearing fire alarm sounders
- Pupils working unsupervised
- Potential use of buildings and facilities for extended periods beyond the normal school day.

The Trust's policy is to include all users who may have reduced mobility. Ease of escape for such persons must be considered in the initial stages of the design process. Any requirement for evacuation assistance or portable equipment should be avoided where practical. In all new build and major refurbishment projects, provision will be made to support strategies for persons who might need assistance with evacuation, including the provision of evacuation lifts or a firefighting lift used for evacuation purposes (subject to the requirements for the use of lifts), and refuges with emergency voice communication facilities. Refuges will comply with the following:

- Enclosed in fire resisting structure
- Appropriate size to accommodate the user without restricting the escape route
- Provided with communications for any person in the refuge
- Accessible to and from the outside via a protected escape route

- Provided with emergency lighting
- Provided with Fire Action Notices, emergency numbers and egress procedure
- Sole use for egress purposes for individuals with identified special egress needs
- Refuge areas should only be used as a temporary haven whilst awaiting egress

Where fire engineering is proposed for a specific means of escape solution the additional challenges of the academy must be included in thorough sensitivity testing. Where evacuation simulation models are to be employed, 3rd party accreditation is obligatory. Adequate safety margins must be built into evacuation time studies allowing for fire related challenges, in particular slow response times and the potential numbers of users who may have difficulty evacuating, which will include staff and pupils with temporary issues, as well as mobility impaired persons.

When considering the design requirements for fire safety systems in Trust premises it is important to adopt a whole life approach which includes future maintenance and management requirements. This will take into account potential changes of use through the life of the building, avoid the need to provide retrospective solutions, and reduce ongoing maintenance and management costs incurred during statutory and standards-compliance testing.

When considering the selection and procurement of active fire safety systems and components, it is important to factor in quality, reliability, availability, serviceability (including access) as well as the cost of replacement parts. The Trust will therefore seek to work with designers, contractors and suppliers as far a reasonably possible to identify through life costs, and to specify third-party certificated or otherwise quality assured fire protection products and services wherever possible as part of any new build or refurbishment project. In addition, to insist on high standards of workmanship to minimize fire risks both in the completed building and during construction, and to eliminate as far as practicable, costs associated with rectification of problems created by poor workmanship or product design and specification.

The Trust will aim not to use external escape stairs or spiral stairs in any future design for a new build project or refurbishment. During the design phase, every effort will also be made to avoid dead-end conditions and inner room situations.

5.1 Means of Escape

The basic principle underpinning effective fire safety arrangements is that persons within a building should receive early warning in the case of an outbreak of fire and should be able to make their way to a place of safety, without reliance on emergency responders. A place of safety is generally accepted to be outside the building at a point from which evacuees can safely disperse.

In order to make their way to a place of safety persons may pass through a route classed as a place of relative safety such as a protected staircase, corridor, or through a dividing wall between buildings or within buildings.

All escape routes should be designed to enable self-evacuation wherever practicable. All buildings within the Trust estate should have designated and protected primary and secondary escape routes leading to a place of safety and the designated assembly points. Escape routes should be adequately signed and covered by emergency lighting. Building specific details should be recorded on the fire drawings held at each school.

When considering the factors that will influence escape related to the risk profile and occupancy levels of a specific building, it is important to look at the stages in the process of escape and the maximum distances people can be expected to travel. Escape is generally considered in four distinct stages as follows:

- Stage 1 - escape from the room or area of fire origin
- Stage 2 - escape from the compartment of origin via the circulation route to a protected stairway or an adjoining compartment offering refuge
- Stage 3 - escape from the floor of origin to the ground level
- Stage 4 - escape at ground level away from the building

The Trust's requirement for means of escape provision will be in accordance with relevant legislation and Approved Codes of Practice, informed by a risk assessment based on the intended occupation and use of the building in question. Means of escape in any new build or refurbishment project will be provisioned in support of a single stage simultaneous evacuation protocol. Means of escape travel distances will be in accordance with the relevant purpose group(s) identified in the Approved Documents unless, through the application of fire engineering principles, distances can be increased in response to identified need or design requirements.

Travel distances will generally meet the requirements set out in Approved Documents which, for the purpose group associated with educational establishments are as follows:

Location	**Escape in one direction only**	**More than one escape direction**
General areas	18m	45m
Special hazard rooms	9m	18m

In new buildings where BS9999 is used as the basis to satisfy the requirements for fire safety. Travel distances may be extended if additional fire protection measures are provided but subject to certain limitations.

Where dead-end corridors exist, they shall be protected corridors, separated from the remainder of the accommodation by a minimum of 30 minutes fire resistance, having FD30S doors fitted with self-closing devices.

Inner room situations will be addressed by the following:

- The access room shall not be a place of special fire hazard, and
- Either, a suitably sited vision panel shall be located in the dividing wall or door; the access room shall be fitted with automatic fire detection, or the dividing wall shall terminate at least 500mm from the ceiling.

When considering the means of escape, and the active and passive fire safety measures required to satisfy the above principles, consideration must be given to infrequent users of the premises, including members of the public.

Final exit doors should not lead people into an enclosed area from which there is no further escape. Where a final exit leads to steps outside the building, care should be taken to avoid having only single steps.

Doors on escape routes should open in the direction of escape travel. Final exit doors should only be secured by simple fastenings that can easily be opened without the use of a key and without having to manipulate more than one device. Where practical, final exit door devices should be uniform throughout a school. Where electro-mechanical door devices are fitted they should disengage on the actuation of the fire alarm system or be equipped with manual emergency override devices located adjacent to the door, similar in design to a Fire Alarm Call Point.

The locks shall release on operation of the fire alarm system or:

- On the loss of electrical power; and
- Suitable emergency disconnection arrangements shall be provided at each locked door on the exit route, this will normally be in the form of the operation of a ‘break glass’ unit positioned adjacent to the door. Each emergency break glass unit shall:
    - Be coloured green
    - Be in a prominent position suitable for escape
    - Be clearly labelled
    - Be a double pole type that interrupts both lines of supply
    - Not re-lock until reset, e.g. upon replacement of the glass in the unit

Display information and items are often required within corridors. Where this is the case, fixed encased display facilities should be provided. The volume and nature of display materials should be subject to a risk assessment. Displays should be avoided within staircase enclosures.

Where exit routes are through an open plan area, the floor surface should indicate the route and management policies should ensure that this is kept clear of any obstructions.

Where fire engineering is proposed for a specific means of escape solution the additional challenges of the Trust must be included in thorough sensitivity analysis testing. Where evacuation simulation models are to be employed, 3rd Party accreditation is obligatory.

5.2 Evacuation

The Trust's escape strategy is to ensure that, as soon as a fire alarm has actuated, all of the occupants leave the building simultaneously. The actuation of a call point or detector will therefore be required to give an instantaneous warning from all fire alarm sounders for an immediate evacuation.

Each academy should aim to ensure that all buildings can be fully evacuated within 2.5 minutes of the alarm actuating. Where there is sleeping accommodation on the premises, evacuation times will be extended to take account of an increased pre-movement phase, but nonetheless the 2.5 minutes should be seen as a starting point so long as every effort is made to reduce the time taken and the risk is mitigated by the effective management of fire safety measures and through the routine use of fire drills.

It is the responsibility of each academy to ensure that there are sufficient fire evacuation marshals across all school buildings to support evacuation plans.

Fire safety procedures within Trust buildings must make provision for occupants who might need assistance to make their way to a place of safety. In all new build and major refurbishment projects, provision will be made to support strategies for persons who might need assistance with evacuation, including the provision of evacuation lifts or a firefighting lift used for evacuation purposes subject to the agreement of the fire and rescue service, and refuges with communication facilities. Refuges will comply with the following requirements:

- Enclosed in fire resisting structure
- Refuge space not less than 1400mm x 900mm
- Provided with emergency voice communication system
- Accessible to and from the outside via a protected escape route
- Provided with emergency lighting

- Provided with Fire Action Notices, emergency numbers and egress procedure
- Sole use for egress purposes for individuals with identified special egress needs
- Refuge areas should only be used as a temporary haven whilst awaiting egress

Any requirement for evacuation assistance or equipment within existing buildings should be addressed locally through the use of Personal Emergency Evacuation Plans (PEEPS). Where there is an identified need to use evacuation chairs or other portable devices, consideration must be given to the number, location and availability of personnel to aid evacuation. To comply with Health and Safety legislation, all members of staff who would be expected to use evacuation equipment e.g.an Evac+ Chair must have documented training and certification to demonstrate competency in their ability to use the chair.

Each academy will ensure the provision of appropriate instruction and fire action notices covering evacuation procedures to all staff, students, visitors and contractors. Fire Action Notices will be located adjacent to each Fire Alarm Call Point, within classrooms and other relevant locations. Each school will ensure that evacuation plans exist and are practiced on a termly basis, with records maintained accordingly.

5.3 Lifts

Lifts should not be used for evacuation purposes unless they have been designed and installed to an evacuation standard. Accommodation lifts can only be used for evacuation purposes when subject to a risk assessment in accordance with BD2466 (2009) published by Department for Communities and Local Government. Accommodation lifts should carry as standard 'do not use in case of fire' signage.

5.4 Occupant Profile and Capacity

The basic principles underpinning effective fire safety arrangements is that persons within a building should receive early warning in the case of an outbreak of fire and should be able to make their way to a place of safety, without reliance on emergency responders. A place of safety is generally accepted to be outside the building at a point from which evacuees can safely disperse. In order to make their way to a place of safety persons may pass through a route classed as a place of relative safety such as a protected staircase, corridor, or through a dividing wall between buildings or within buildings. Occupancy figures for upper floor levels in taller buildings may be required to be limited in order to meet the stair and exit capacities.

Approved Document B describes a series of defined 'purpose groups', used to link the use of the building, representative hazards and means of escape based on occupancy characteristics, and the fire safety provisions applied to the premises as recommended within the guidance.

The occupancy of most of the buildings within the Trust falls into the following purposes group(s):

- Group 5: Assembly and recreation

In addition to staff employed within each of the sites, it is anticipated that visitors will be limited to parents, hirers, Trust staff and contractors. Those principal occupants within the academy are characterised as being familiar with the buildings and their procedures. Unescorted hirers and contractors are inducted and made familiar with those parts of the academy being visited. Other visitors will be escorted whilst on site.

In assessing the risk to those within the premises, the follow factors are considered:

- The probability of a fire occurring
- The likely severity
- The ability of the structure to limit fire spread
- The consequential danger to occupants

Occupancy figures are often the deciding factor in determining the width of escape routes, staircases and doorways, as well as the number of exits required. Rooms having a capacity of more than 60 persons should have at least two exits, remotely located from each other so that a fire in any single location within the room does not prevent escape from both doors simultaneously.

Occupant capacities for meeting and assembly rooms will be assessed on an ongoing basis as part of the Fire Risk Assessment regime in place within the Trust and recorded within the assessment document. Acadmies are required to ensure that capacities are adhered to and that means of escape are maintained during events.

5.5 Means for Giving Warning in the Event of a Fire

The provision of automatic fire detection is to provide early warning for the occupants in the event of a fire. The minimum level of fire alarm system for buildings within the Trust generally is a manual system comprising call points and sounders. Trust sites have the added benefit of smoke detection systems, designed to give a warning of fire at an early enough stage to enable all occupants to escape safely, before the escape routes are impassable owing to the presence of fire, smoke or toxic gases; with the additional objective of providing early warning of fire in specified areas of special or high fire risk.

In all cases, the Trust will apply a simultaneous single stage evacuation strategy. As a consequence, fire detection and alarm system design and performance, as well as building evacuation plans will be tailored to support this strategy.

To ensure a reasonable and appropriate standard of fire safety for employees, pupils, contractors and visitors to all Trust premises, sites shall aim to have automatic fire detection and warning systems that meet the requirements of BS 5839-Part 1:

Fire detection and fire alarm systems for buildings; Code of practice for design, installation, commissioning and maintenance of systems in non-residential premises.

The British Standard has different categorisations for fire alarm and detection systems, based on life or property protection objectives, and the extent of detector coverage provided. The Trust's policy for the provision of fire alarm and detection systems underpins its design strategy objective of preserving life by providing early detection and warning to occupants of its buildings. This will be achieved by the following, determined through fire risk assessment:

- For buildings providing sleeping accommodation – Category L1: with automatic fire detectors installed in all areas within the building
- For other accommodation – Category L2: automatic fire detectors installed in all escape routes, rooms opening onto escape routes, and other defined areas
- For smaller residential properties, consideration will be given to the provision of a mains powered fire detection and alarm system conforming to BS5839 Part 6: 2013 Fire detection and alarm systems for domestic dwellings.

Regardless of the size of the premises and the category of system installed, all special risk areas will be provided with appropriate fire detection. The specification should require addressable, open protocol, detector bases allowing the fitting of ancillary equipment such as sounder and beacon units. Multi-sensor devices will be used wherever possible and practicable. Heat detection is generally slower to react to a fire but will be required in areas where smoke detection is likely to cause false alarms.

Manual call points will be provided at all final and storey exits in each premise in accordance with BS 5839 Part 1. Additional Manual Call Points will be provided at exits from special risk rooms that are accessed externally e.g. Plant rooms. In order to reduce the likelihood of malicious or accidental actuation of Call Points, in those buildings where there is public access, or there is a risk of impact with the device e.g. Sports Halls, Call Points will be fitted with clear protective covers.

The Trust requires alarm sounders and beacons in all escape routes, common areas and normally occupied rooms. Sounders will be provided to ensure that a sound level of 65dbA or 5dbA above ambient noise is achievable, and 75Dba measured at the bed head in sleeping accommodation. Alarm sounders shall be enhanced with visual beacons such that a beacon can be seen in plant rooms and other noisy areas. All fire alarm systems should be capable of operating with devices intended for the hard of hearing such as vibrating pagers, or pillows where any sleeping accommodation is provided.

In addition to the provision of early detection and warning in the event of a fire, fire alarm systems should also act to initiate other fire safety components such as the operation of door hold-open devices, smoke curtains, fire dampers, lifts, plant, smoke vents, etc., commonly referred to a 'cause and effect'.

The requirement for cause and effect programming of detection and alarm systems will be assessed for all new school buildings and major refurbishments, and on a school by school basis for all existing buildings. Gas supplies and air handling systems must be interfaced to cut off on the actuation of the fire alarm and be provided with an automated reset. Computer server rooms may require specialised alarm systems. All such interfaced equipment must be provided with a key switch to allow independent testing of the system and equipment.

False and unwanted fire signals are a costly disruption to academy life and can lessen the urgency with which staff and students respond to alarms. The Trust, through good design and management, will aim to keep rates of false and unwanted fire signals to within tolerable limits as indicated in BS5839: Part 1. Steps will be taken to reduce the incidence of false or unwanted fire signals at the design stage by the introduction of high integrity detection devices capable of robust differentiation of false, unwanted and real fire signatures.

New systems should be compatible with or match existing effective systems. Changes of room use are common features so installations, detection and alarm equipment must be adaptable and any detection or alarm system upgrades should be remotely 24 hours monitored, with arrangements in place to notify the academy or security/respone staff of alarm actuations out of hours.

In new buildings or major refurbishment schemes, depending on the scale of the project, consideration will be given to the provision of voice evacuation communication system designed to provide occupants with instructions pertaining to their location, proximity to the situation and the emergency evacuation strategy.

5.6 Emergency Lighting

All escape routes should be provided with emergency lighting complying with BS 5266 Emergency lighting – Part 1: Code of practice for the emergency lighting of premises in order to fulfil the following functions:

- To clearly indicate and illuminate escape routes and exit signs, including escape routes which are external to the building
- To clearly illuminate exit door devices
- To ensure that changes of level and direction are indicated
- To ensure that fire alarm call points and firefighting equipment can be easily located

All common escape routes should be provided with adequate artificial lighting, with lighting to the escape stairs being on a separate circuit from that supplying any other part of the escape route. In most cases it will be sufficient to have a system of 'non-maintained' emergency lighting, e.g. where the luminaires are only illuminated if the normal lighting fails. Consideration should be given to levels where hazards are present in respect of people with impaired vision.

The Trust will specify that emergency and escape lighting luminaires in all new build and refurbishment projects will be of the self-contained battery type, activated automatically in the event of a failure of a local sub-circuit, with a battery duration of 3 hours. Depending on the required location, either maintained (always on) or non-maintained (only lit in the event of a local mains failure) will be provided.

Maintained emergency lighting will be specified for use in places of assembly such as theatres, seminar rooms, and assembly halls within the academies.

Emergency lighting provided within existing academies within the Trust should be provided with a remote key-operated test capability, and an integral means of identifying that the unit is functioning (tell-tale device). Devices are to be installed in a uniform manner that ensures that tell-tale devices can be readily seen from the ground without having to resort to ladders or other equipment to access them. In all new or refurbished properties, a fully monitored, addressable emergency lighting system is to be provided to reduce maintenance costs and provide accurate records of maintenance required by statutory regulations, and provided with capacity sufficient so that other parts of the building can be added as part of strategic maintenance funding in the future.

In order to most cost-effective and sustainable solution emergency and escape lighting units will be of the LED-based type.

Lighting units incorporating fire exit signage can be either bulkhead, box or blade type.

Monthly functional tests and annual servicing and maintenance are completed in accordance with BS 5266: Part 8 by a competent contractor.

5.7 Signage

Fire safety signs are divided into several categories, each category supporting and complementing an individual part of the fire safety management strategy. Signs will be provided in accordance with the Health and Safety (Safety Signals and Signs) Regulations 1996 and BS 5499: Part 1.

Signage should be provided for the following:

- means of escape signage to assist in an effective and efficient evacuation to a designated place of relative or ultimate safety. These are supplemented by way finding guidance signs and signing systems are used to assist in identifying escape routes by occupants.
- Every doorway or other exit providing access to a means of escape, other than exits in ordinary use (e.g. main entrances), should be distinctively and conspicuously marked by an exit sign in accordance with BS ISO 3864-1 and
  BS 5499-4.
- Fire safety notices, used to inform and instruct building occupants of measures to be taken to maintain fire protection features, such as. “Fire door keep locked shut”.
- To provide information for occupants of the actions to be taken in relation to fire alarms, evacuation procedures and/or emergency planning.
- Emergency escape equipment signs are used to identify devices and panic hardware provided specifically to ensure efficient and effective evacuation and to override security on an escape route.
- First aid firefighting equipment signs, incorporating the appropriate classification information, that are used to identify the equipment type.
- Emergency equipment identification signs that are used for alarms, emergency telephone and other essential equipment.

Every doorway or other exit providing access to a means of escape, other than exits in ordinary use (e.g. main entrances), should be distinctively and conspicuously marked by an exit sign in accordance with BS ISO 3864-1 and BS 5499-4. Exit signage will include ‘figure moving through doorway’ pictograms. People with restricted vision or colour perception may experience difficulty in seeing or recognising fire safety signs which will include fire exit signs. Additional fire safety signs may be required that are sufficiently large and well designed with a good, clear typeface and sited so that they can be seen easily and can be readily distinguishable. It is sometimes useful to supplement a safety sign with text to aid understanding.

Illuminated escape signage shall be utilised as far as reasonably practicable and shall augment emergency lighting. Non-illuminated signage should be photo luminescent. All signage should be as large as practical to aid those with impaired vision.

There should be clear colour contrast of doorways, edge marking of stairs and steps etc. to aid those with impaired vision.

Arrangements should be made to ensure that all fire safety signs and devices e.g. Manual Call Points, are readily identifiable and that there is a minimum of 0.3m clear space between those items and other general material on display. If necessary, the areas surrounding notices and fire safety devices should be delineated in order to identify the zone that is to be kept clear.

5.8 Fire Suppression Systems

Automatic sprinkler systems installed in buildings can reduce the risk to life and significantly reduce the degree of damage caused by fire. Sprinkler protection can also sometimes be used as a compensatory feature with the provisions of the approved documents are varied. In Wales and Scotland where education matters are devolved it is a requirement for sprinklers to be fitted in new schools or academies. This is not the case in England, where the Government has not made sprinklers compulsory.

The installation of an active fire suppression system can have many positive benefits, including:

- Greater flexibility in building design
- The reduction, through risk assessment, of active and passive fire safety measures
- Reduced disruption and business continuity risk
- Reduction of insurance premiums, and
- Meeting environmental targets by a reduction in the risk of water pollution from firefighting measures, the amount of waste materials damaged in a fire going to landfill and the need for the use of raw materials for rebuilding purposes

It is the policy of the Trust that automatic sprinkler systems will not be routinely provided in its academies. The decision to include automatic sprinkler systems in any future academy development will be made on the basis of cost-benefit analysis, or where their inclusion supports design features required to overcome particular challenges or risks. Sprinkler or water mist suppression systems will be considered at initial design stage; and where they are not to be provided a detailed explanation and justification will be required. Suppression systems shall be designed and installed in accordance with the appropriate British Standard.

Hoods and extraction ductwork, including access points and filters will be specified and designed in such a way as to reduce fat, oil and grease deposits building up within them, and to ease cleaning and maintenance. Baffle or cartridge type filters should be specified in preference to mesh types. Consideration will also be given to the provision of automatic fire suppression within extraction ductwork. Best practice guides DW172 and TR19 (BESA publications) will be used to inform design principles for use in the Trust estate. Kitchens will also be provided with gas-proving equipment, fire detection and CO2 monitoring devices; all gas-fuelled appliances will be equipped with flame failure devices. Easily accessible emergency gas shut offs shall be provided in each room.

6. Property Protection

The Regulatory Reform (Fire Safety) Order 2005 places a duty on the responsible person to ensure as far as reasonably practicable, the safety of their employees and others who may be affected by a fire who are on or near the premises. In meeting that duty, the Trust will take steps to reduce the likelihood and extent of fire, provide and maintain appropriate means of escape, measures to detect and give warning of fire, and introduce management and review arrangements to ensure that through the life of the building, those measures are maintained to an appropriate standard.

In addition to life safety, the Trust is also aware of the potential impact of a fire on its ability to provide first class teaching facilities, through the loss of facility, or denial of access. Beyond those passive and active fire safety measures introduced for life safety, there is scope to make provision to limit the extent of fire and smoke spread, reducing the time and cost associated with reinstatement, and minimising business interruption.

Fire protection measures aimed at property protection will be considered in all new building designs and existing property improvement schemes. Such measures may include additional or increased standards of compartmentation beyond that required for life safety, and the addition of active fire safety measures including fire suppression systems. Where identified at the design stage, consideration will be given to additional fire protection aimed safeguarding high value assets (monetary or academically significant assets). Wherever practicable and economical to secure property protection, the guiding principle adopted for compartmentation will be to restrict the spread of fire to the room of origin. In practical terms the Trust will consider extending life safety protection to include existing high value rooms, or in locations where fire protected 'cells' can be created by judiciously utilising existing elements of structure.

Each academy has a Business Continuity Plan in place, which is uploaded onto the Trust's electronic compliance system. As part of any future design project for new build or refurbishment projects, liaison will be required between representatives of the Trust, building consultants and the Headteacher in order to ensure that Business Continuity Plans and procedures, as well as fire risk assessment methodologies are applied to identify those additional measures required to reduce the potential and extent of business interruption in the event of a fire, as well as protect key assets.

6.1 Compartmentation

A fire compartment is a building or part of a building, comprising one or more rooms, spaces or storeys, that is constructed to prevent the spread of fire to or from another part of the same building or an adjoining building.

The principal components of compartmentation within premises are those protecting means of escape, floors and walls separating occupancies, together with special risk rooms and places of a higher fire risk.

Passive fire protection is an integral component structural fire protection and fire safety in a building by attempting to contain fires or slow the spread through use of fire-resistant walls, floors, and doors. Structural fire protection safeguards the essential structural components of the building and its integrity.

In respect of internal fire spread (structure) the Building Regulations stipulate the following (Requirement B3):

- Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, comprising either or both of the following:
    - Sub-division of the building with fire-resisting construction
    - Installation of suitable automatic fire suppression systems
- The building shall be designed and constructed so that the unseen spread of fire and smoke within concealed spaces in its structure and fabric is inhibited.

Compartmentation is achieved through the introduction of fire barriers formed from walls, floors, ceilings and cavity barriers. The purpose of compartmentation is four-fold, namely:

- **Preventing** rapid fire spread trapping occupants in the building, and protecting escape routes
- **Reducing** the possibility of fires becoming large and therefore more dangerous to occupants, the fire and rescue service, and persons in the vicinity of the building; and
- **Containing** the fire to a single compartment, minimising fire damage to the property and business interruption
- **Protecting** areas of high financial or strategic value

Approved documents specify the requirements for building sub-division based on the use of the building, the fire loading, height to the topmost floor and the availability of sprinkler protection. Academy floor space could be classed in the 'assembly and recreation' purpose group, for which Building Regulations permit a compartment size of 2000m2. This is a substantial area and as a result sub-compartmentation of areas over 1000m2 will be considered, based on property protection/business continuity needs, and risk assessment. This can be achieved by utilising internal walls and corridors.

The number of openings shall be kept as low as reasonably practical and hidden voids will be protected by suitable cavity barriers.

The following features should always be compartmented:

- Protected staircases or firefighting staircases
- Protected corridors in dead-end situations
- Vertical rising shafts that penetrate through the horizontal compartmentation (lift shafts, risers etc)
- Walls common to two or more buildings
- Plant rooms and areas where activity or content defines them as posing a high risk of fire
- Business critical facilities, areas containing high value, or irreplaceable information etc

Most Trust floor space could be classed in the Approved Document purpose group for 'Assembly and recreation', where Building Regulations allow a permissible compartment size of 2000m.

Effective fire compartmentation is a core element supporting the fire strategy and arrangements for means of escape. It is essential that management arrangements are in place to ensure that all elements, particularly doors in compartment walls, are inspected and maintained in line with recommended guidance. Advice should be sought prior to any future structural alterations that could impact on compartmentation. In addition, a policy and procedure should be put in place to ensure that contractors or site staff who breach compartmentation in order to undertake maintenance work or route services, adequately fire stop any resultant opening using proprietary materials and methods. In all cases, where there is a need to breach existing compartmentation, the Trust shall be notified prior to any works commencing and on completion of the works. Trust and academy policies and procedures shall be applied to all proposed 'hot' works on academy premises. In addition, policies and procedures are required prior to other permitted works being carried out, where compartmentation is proposed to be, or likely to be breached.

In buildings where alternative staircase enclosures are provided there is a requirement to separate the stairs and building materials used to divide areas of floor space should provide a minimum of thirty minutes fire resistance. By looking at the building design and creating a point where two walls are opposite each other on a corridor, the placing of the fire doors at this point would effectively provide a level of compartmentation that divides the floor space in half, allowing the design to meet the requirements of the Building Regulations at moderate cost. For more complex layouts this may take more of a design effort, but the principle can be repeated.

Corridors that lead to alternative means of escape do not need to be protected corridors and thus the doors on these corridors (except cross-corridor and other specifically identified doors) do not need to be self-closing fire doors.

In all areas within academies, the risk of breaches due to fire doors being wedged open is considerable and may result in the additional cost of provision of required approved hold open devices. Doors on escape routes designed to have self-closing devices fitted should only be held open by automatic hold-open devices directly connected to the fire alarm system. It is recognised that the retrospective fitting of automatic hold-open devices directly connected to the fire alarm system is expensive and not always practical in existing buildings. Where there is an identified need to hold open doors during normal operations and acoustic devices are being considered, they should be subject to a risk assessment.

Doors held open by automatic hold-open devices must be closed at night, and therefore an automatic timer should be installed as part of the detection and alarm system, or management arrangements must be put in place to ensure this occurs.

Consideration must be given to the needs of mobility-impaired occupants when siting hold-open devices, however auto opening devices that aid mobility impaired persons may not be suitable in all locations and should be subject to a risk assessment.

Over time and for various reasons, the use of a building may change, and a need arises to breach through a fire resisting wall or floor. It is therefore important to consider what passive fire protection can be included into fire compartmentation to pre-empt the need for future penetrations.

Intumescent protection sleeves with internal smoke barriers shall be installed where cables pass through fire compartment walls. The sleeve should be of suitable size to allow for future extra cabling.

Where, during the process of refurbishing or upgrading existing buildings, the opportunity arises to inspect existing compartmentation the compartmentation shall be inspected, and any deficiencies made good as part of the upgrading or refurbishment works.

Vertical service shafts:
Where vertical risers and service shafts are located in buildings, 60 minutes fire resisting compartmentation is required at all access points and where services leave shafts other than at floor levels. Detection will normally be required at the top of shafts.

6.2 Special or High Hazard Rooms

Special fire hazard areas are defined within Approved Documents as being boiler rooms, oil-filled transformer rooms, storage spaces for fuel or other highly flammable substances, or rooms housing a fixed internal combustion engine. Additional consideration should be given to areas containing plant or goods of high value, data processing equipment, high hazard goods or processes, or any business-critical areas.

Within the Trust, the following can be classed as special or high fire hazard areas:

- Main school kitchens
- Science classrooms, 'STEAM' and Prep rooms
- Technical classrooms e.g. Food or Design Technology with heat sources
- Caretakers workshops
- Plant rooms including Air handling equipment
- Electrical intake/distribution rooms
- Storerooms

The following areas will be assessed and addressed on the basis of risk:

- Art classrooms and studios
- Drama
- Other technical classrooms and IT server rooms
- Exam rooms
- Tea points and rest rooms

Special hazard areas will be required to meet specific requirements for compartmentation, including doors and service penetrations, automatic fire detection and signage. Regardless of the size of the premises and the category of system installed, all special risk areas will be provided with appropriate fire detection.

Where practical, high fire risk areas should be located such that any fire arising in them would have the minimum impact on the remainder of the academy for example locating science laboratories, kitchens, etc. on the top floor, or on external walls. However, access for firefighting must be considered and additional compartmentation at ground floor level may present a more suitable solution.

6.3 Ducts and Dampers

In some situations, particularly in escape routes, there can be a requirement to fire rate ductwork to prevent fire from breaking out of or entering ducts in order to maintain compartmentation. Extraction ductwork should be non-combustible and vent externally. Ductwork should be enclosed in a minimum of 30-minute fire resistant material where present in an escape route. Automatic fire dampers shall be provided where ductwork passes through fire resisting elements of structure. Access for maintenance must be provided.

Fire dampers should be installed within ventilation ductwork in the following situations:

- Unprotected ductwork. Wherever ventilation ductwork passes through a fire-resisting wall or floor or any other fire-resisting division

- Ductwork in a fire-resisting enclosure. At all points at which the ventilation ductwork passes through the fire-resisting enclosure; and
- Fire-resisting ductwork. Wherever the ventilation ductwork is penetrated by an unprotected branch, inlet or outlet.

Installations should always be in the plane of the fire resisting division, and not elsewhere in the duct. Where ducts penetrate drywalls, they must be framed with the studwork, lined with plasterboard and effectively sealed as per the board manufacturer's detail.

6.4 Fire Curtains and Shutters

Fire curtains and shutters provide a fire protection solution to protect escape routes, enclose or sub-divide areas where fixed or rigid passive fire protection measures might otherwise inhibit day-to-day use, or are impractical. Shutters and curtain can achieve a level of fire resistance of up to 4 hours. Examples of fire shutter locations within the Trust can be found in a number of kitchen, servery and dining areas as part of the fire protection/compartmentation arrangements. Fire curtains can be fixed or arranged to descend in the event of a fire alarm actuation.

Care must be taken in ensuring that what is specified and installed provides the fire resistance required; for example, if intended to create a 30 minute escape route then fire curtains must possess 30 minute insulation from excessive heat together with hot and cold smoke protection and not just fire integrity. Products should only be installed and maintained by Third Party accredited installers.

6.5 Firestopping and Linear Gap Sealing

Linear gaps occur where different components of a building interface. Firestopping requirements must be expertly determined, taking into account a number of factors such as the level of fire resistance required and how the interfacing components might behave in a fire in terms of expansion and deflection, to guarantee compliance. The attainment of fire compliant linear gap seals can be problematic if the passive fire protection of a building has been fragmented into different sub-contractor's work's packages. The responsibility for the linear gaps must be unambiguously allocated by the Principal Contractor.

When firestopping around services a number of factors must be considered:

- Required period of fire resistance
- Type, number and size of services contained within the aperture
- How the fabric of the building will react in a fire
- Later addition or removal of services
- Load bearing or impact resistance requirements
- Thermal movement or other ambient conditions; and

- Acoustic or other non-fire issues

Products should only be installed as fire tested and systems should not be mixed and matched as manufacturer's products will vary and products from one manufacturer may not work with similar products from another manufacturer. Similarly, seals damaged by the introduction of additional services should be repaired with the same product.

Urethane foams are rarely tested or suitable for sealing service penetrations. They must not be used unless evidence is provided to confirm they are tested and certified as suitable for each application.

The correct type of intumescent mastic must be specified for each application:

- Acrylic mastics are the most basic in terms of fire performance. Third Party accreditation is a key requirement
- Silicone mastics are waterproof and generally more flexible, they should be used in cavity voids and other areas where thermal movement of the structure and moisture may occur.

Graphite mastics generally have both a high expansion capability and the ability to exert pressure. They should be used around cables and small plastic pipes as they will displace and damp penetrations as such services melt.

6.6 Roof Voids

Roof voids do not normally form part of the occupied accommodation within the school. An appropriate assessment will be required of the early warning and means of escape requirements for persons having to access roof voids in order to carry out maintenance or repair facilities located within them.

Roofs that form part of means of escape should have an appropriate level of fire resistance.

Extensive concealed spaces should be subdivided in order to limit the potential for fire spread and property damage. Cavity barriers should be used to subdivide roof spaces and located at intervals so that the maximum dimension in any direction is no more than 20m.

Within a roof void, in addition to the installation of vertical barriers, firestopping should be carried over the full thickness of the wall. If roof support members pass through the wall, fire protection to these members for a distance of 1500mm either side of the wall may be required.

6.7 Basements and Cellars

Within the Trust estate there are a large number of converted older buildings e.g. Victorian, or older purpose-built premises from the same period, many of which have basement or cellars. In a number of cases, heating systems and/or electrical intake and distribution are housed within them. In academy buildings there should be a minimum of 60 minutes fire resistance between the cellar or basement and the ground floor above. This includes access doors and door sets. Where practical, steps are being taken within the Trust to provide a uniform period of fire resistance that meets that recommendation. It is recognised however that in older buildings that have evolved or changed over decades, it may not always be practical or economical to add fire resisting material to existing structures.

This is often exacerbated by the fact that as heating and electrical systems have been changed and upgraded over time, pipe and cable networks including cable trays and suspended fixings, significantly restrict access to the cellar or basement ceilings.

As stated above, where practical and economical, ceilings will be upgraded to meet current standards. Where it is identified that this cannot be achieved, a risk-based approach will be adopted informed by this document and the fire risk assessment. In such cases, the approach will consider the use to which the cellar or basement is put, the means of escape provision from the remainder of the building, early warning systems, and the arrangements that can be put in place to limit fire spread within the cellar or basement itself. Those measures will include potentially limiting additional compartmentation measures to the room of special fire risk as opposed to the whole floor and restricting the potential for fire spread by removing combustible storage from the remainder of the cellar or basement area.

6.8 Fire Doorsets

A fire door 'assembly' is a system where all or several items (door leaf or blank, frame, glazing, hinges and other hardware) are sourced separately and typically assembled on site. A fire 'door set' is a door system where everything has been supplied from one source (typically a Third Party accredited door manufacturer), partly or completely pre-assembled where all of the components are fire tested as a unit. Pre-assembled door sets are preferred as they are the best method of attaining fire compliant installations and can be more cost effective as they reduce installation time. All fire doors must be fully Third Party Certified, normally identified by being plugged in accordance with the BM TRADA Q Mark Assurance scheme or carry the BWF Certificate label, backed by the manufactures Primary Fire Test evidence in accordance with BS476: Part 22.

In locations where, self-closing devices are required to be fitted to fire doors, they shall be overhead units meeting the requirements of BS 1154. This requirement also applies to double and 1½ leaf door sets, where each leaf shall be fitted with an individual overhead self-closing device.

Doors and associated partitions separating stair enclosures forming means of escape from rooms and corridors opening onto them should be suitably fire resisting and positively self-closing. Such doors should not be fitted with 'acoustic' hold open devices. Self-closing fire resisting doors to rooms containing special risks e.g. Science classrooms, should also not be fitted with acoustic hold-open devices.

Double doors should be avoided wherever practicable and if they must be used, they should not have rebated meeting edges.

All fire doors shall be fitted with "Fire Door Keep Shut" signs. Cupboards and storerooms will be fitted with "Fire Door Keep Locked" signs where they ae usually kept locked shut and do not have self-closing devices fitted.

Doors with electro-magnetic hold-open devices will be fitted with "Automatic Fire Door Keep Clear" signs.

The glazing components of fire doors (vision panels) will be factory fitted clear fire-resistant glazing clearly identified by etched markings and installed in accordance with the relevant standard.

Vision panels will be positioned for the benefit of all occupants, including wheelchair users.

Any fire resisting door that is required to have an air transfer grille fitted shall not be compromised in terms of its fire resisting qualities. Doors that are not required to resist the passage of smoke can be fitted with grilles containing only a heat-activated intumescent type device. Those doors that are required to resist the passage of both smoke and fire (on internal escape routes) shall be fitted with an electromagnetic / electromechanical device interfaced with the fire detection and alarm system.

Fire doors should be subject to a suitable system of maintenance and maintained in an efficient state, in efficient working order and in good repair. They must be inspected and maintained by a competent person.

All fire doors protecting means of escape shall adhere to the following:

- Be fitted with intumescent strips and brush smoke seals
- Be fitted with an overhead self-closing device
- Be of contrasting colour to the walls or frame
- Be provided with mobility impaired friendly handles usable by a closed fist and one-handed operation
- Allow flexibility in future usage by all room door sets, corridor fire door sets and partitions adjoining circulation corridors being of 30 minutes fire resisting standard and capable of being fitted with self-closing devices

- Be marked and labelled as being of fire resisting construction
- Be marked 'Fire Door Keep Shut"
- Have mains powered free swing automatic hold open devices on room doors likely to be wedged open
- Corridor doors are generally to be provided with magnetic hold open devices interlinked to the alarm system; where used at the junction of alarm zones they must release on activation of either zone
- Where magnetic door locks are used at the junction of alarm zones they must release on activation of the alarm system of either zone
- Electrical door closers, locks and hold opens must fail safe in the event of a power failure
- All doors on an escape route and final exits that incorporate a magnetic security device or are automatic doors that require an access card or entry code must fail safe to the open position in the case of an alarm activation
- All doors on an escape route and final exits that can be secured by a manual key lock must have a handle or other simple fastening that can be easily operated, without the need for a key or other specific technical knowledge, from the side approached by people making their escape

Access control systems must be programmed such that all escape routes serving areas which may be occupied are available should there be a fire. There should be no requirement to use a card, code etc. under these circumstances.

6.9 Fire Resistant Glazing

Fire resistant glass should always be marked with a stamp to advise exactly what type and properties of fire performance the glass provides. If such a symbol is not clearly displayed, then it will be assumed that the glass is not fire resistant. All glazing required to be fire resisting shall confirm to the relevant standards.

Fire resistant glazing systems have to be installed as tested, using the correct, supplier specified, compatible components. Any site application that deviates from the test, particularly those involving the installation of larger panes must be re-tested or assessed by a competent person.

The commonest fire-resistant glass types provide integrity but no significant level of insulation protection; this cannot be used, for example, to protect a refuge area.

Security or safety glass cannot be expected to provide any tested fire performance unless expressly stated.

6.10 Cavity Barriers and Fire Stopping

Any voids within a building need to be effectively separated at determined locations with cavity barriers to limit the unseen spread of fire and smoke. Barriers for fire and smoke should provide at least 30 minutes fire resistance including insulation and integrity; those just for smoke require integrity only.

Where vertical fire separation is specified between floors, a cavity barrier to the required fire rating is necessary between floors and curtain walls or other adjoining substrates. They must be installed to the manufacturer's fire test detail to ensure that wall deflection due to thermal movement and other factors, will not compromise effectiveness.

Suspended ceiling cavity barriers not forming structural fire separation are typically created by flexible 'curtain' products made from mineral wool or woven glass fibre fabric.

Every service that is installed in a building, such as water pipes, electrical supplies, cable trunking and lighting units, can compromise the fire resistance of a room by creating openings in its walls, floor and ceiling. In respect of the protection of openings and fire-stopping in order to inhibit the spread of fire, the Building Regulations state:

"If a fire-separating element is to be effective, every joint or imperfection of fit, or opening to allow services to pass through the element, should be adequately protected by sealing or fire-stopping so that the fire resistance of the element is not impaired"

Provisions in respect of fire-stopping are detailed as follows:

- joints between fire-separating elements should be fire-stopped
- all openings for pipes, ducts, conduits or cables to pass through any part of a fire-separating element should be:
    - kept as few in number as possible
    - kept as small as practicable
    - fire-stopped

Only certified fire stopping products and systems will be used. Fire stopping requirements must be expertly determined and applied in order to ensure compliance. Third party accreditation is a key requirement.

The use of a building may change during its life, and it is therefore important to consider what passive fire protection can be included in fire compartmentation to pre-empt the need for future penetrations. The inclusion of devices such as fire sleeves to allow for the running of cables when installing fire compartment walls will provide the end user and future contractors with a safe way of running cables through compartment walls.

Intumescent protection sleeves with internal smoke barriers shall therefore be installed where cables pass through fire compartment walls; and should be of a suitable size to allow for future extra cabling.

6.11 Lightning Protection

Lighting protection will be provided in accordance with BS EN 62305 in those premises where an assessment of the risk has been undertaken by a competent engineer and recommendations are made for its installation.

The system should be inspected every 11 months (so that seasonal variations in conditions are observed) by a qualified contractor. The inspection is aimed at the connection of grounded appliances to the grounding points, lightning conductors and the associated wiring. Testing, inspection and maintenance should be conducted in accordance with BS EN / IEC 62305-1.

7. Internal Fire Spread

The rate at which a fire spreads across the surface of a ceiling or wall and the extent to which it contributes to the fire growth is an important factor in the how quickly a fire will grow. It is important to control this feature, particularly in escape routes. The requirements for surface linings of walls and ceilings are contained in Approved Document B.

7.1 Fire/Fuel Loading

Consideration must be given not only to proposed use of any academy occupancy but also potential use in the future. With the need to create income by increasing pupil numbers and external users there is likely to be pressure to increase the capacity of buildings above their original design.

Clear explanations of fuel load limits imposed by the design must be supplied such that end users can understand and apply them; this is particularly important for escape routes and circulation spaces.

Future potential furnishing and storage requirements should be considered, not least to discourage the practice of turning escape routes into storage areas.

The Furniture and Furnishings (Fire) (Safety) Regulations 1988 set levels of fire resistance for domestic upholstered furniture, furnishings and other products containing upholstery. All schools within the Trust are expected to only procure products that meet those Regulations. It is essential that any items brought into the school by staff also meet those requirements, and schools shall not accept donated furniture from any source.

In today's proactive approach to environmental issues, academies are encouraged to provide various different receptacles for different materials. This can lead to waste being retained on site for longer, often in more bulk, as it takes longer to fill receptacles and lack of secure storage facilities for bulk waste receptacles resulting in an arson risk. External storage close to buildings increasing the risk of external fire spread. The Trust should be consulted to gain information as to the amount of waste to be stored and the types and numbers of receptacles to be used.

Adequate secure storage for bulk waste and receptacles should be located externally at least 6m from school buildings, or in a 60min fire compartment within the ground floor accessible only via an external door. Only lockable, enclosed skips should be provided for use by schools.

If the outside of the building is to be used for display purposes such as large advertisement banners, neon signs or external awnings, such items may present a risk that must be assessed.

Consideration must be given to the provision of lockable cupboards and storage areas not only for combustible materials but also bulky or temporary equipment and furniture to prevent the obstruction of escape routes.

Detailed comments on fire loading are contained in the relevant sections of this document.

7.2 Furniture and Furnishings

The Trust's policy in relation to the provision of furniture and furnishings, is that only those items that conform to the relevant British Standard or Regulation will be procured for use within a school or other Trust building. In addition, only those items conforming with the relevant British Standard or Regulation will be introduced into the school by staff and pupils. (See also Fire/Fuel loading section above).

Curtains and drapes used in schools should be fire retardant and certified to BS5867. Washing and cleaning of curtains and drapes should be undertaken to the same standard and a record maintained.

8. External Fire Spread

Approved Documents B notes that the external envelope of a building should not contribute to undue fire spread from one part of a building to another part or form one building to an adjoining building. In the aftermath of the Grenfell Tower fire in 2017, Government amended the Approved Document in November 2018 in relation to external fire spread, to include the following requirement:

Requirement

Requirement	*Limits on application*
External fire spread	
B4. (1) The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another having regard to the height, use and position of the building.	
(2) The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building.	

Regulation

Materials and workmanship

7. (1) Building work shall be carried out—

(a) with adequate and proper materials which—

(i) are appropriate for the circumstances in which they are used,

(ii) are adequately mixed or prepared, and

(iii) are applied, used or fixed so as adequately to perform the functions for which they are designed; and

(b) in a workmanlike manner.

(2) Subject to paragraph (3), building work shall be carried out so that materials which become part of an external wall, or specified attachment, of a relevant building are of European Classification A2-s1, d0 or Class A1, classified in accordance with BS EN 13501-1:2007+A1:2009 entitled "Fire classification of construction products and building elements. Classification using test data from reaction to fire tests" (ISBN 978 0 580 59861 6) published by the British Standards Institution on 30th March 2007 and amended in November 2009.

9. Access and Facilities for the Fire Service

Any equipment provided for fire service use shall be readily accessible by the fire service. This will include access gates and barriers, dry riser inlets and outlets, firefighting lift controls, etc.

A copy of relevant Fire Safety information, including hazard locations and emergency facilities e.g. fire hydrants, firefighting lifts, dry rising mains, etc. should be provided and made readily available at the entrance to each main building for Fire Service use. The location of electricity supply switches, gas shut offs and unusual or high risks to firefighters should be indicated by appropriate door signage and located on plans provided for fire and rescue service use.

The fire and rescue service should be invited to attend each academy on a regular basis to undertake familiarisation visits for the purpose of tactical pre-planning in the event of a fire occurring.

School emergency plans should include arrangements for meeting and providing information and support to fire and rescue responders both during normal occupation e.g. term time, and out of hours or during school holidays.

Fire hydrants, fire and rescue service access, and rising mains will be provided in all new buildings in accordance with the requirements contained in Approved Document 'B' and BS9990.

9.1 Portable Firefighting Equipment

The Trust's policy on the provision and use of portable first aid firefighting equipment is that staff and students are not expected to use a fire extinguisher in the event of a fire. Any attempt to extinguish a fire should only be on the basis that it is safe to do so without undue personal risk.

Large fires mostly start out as small fires and if they can be dealt with quickly and safely using portable fire extinguishers large fires can be avoided. First aid firefighting equipment should be of a type appropriate for the hazards and for the users of the building and placed in locations where it can be readily deployed. Portable fire extinguishers should be selected and positioned in accordance with the recommendations of BS 5306 - Part 8 and commissioned in accordance with BS 5306 - Part 3. In principle, portable firefighting equipment will be provided adjacent to fire exits and call points, and where possible in the same locations in similar accommodation e.g. science laboratories. Extinguishers will be required in science laboratories, computer server rooms, kitchens and areas with valuable contents. Fire Blankets shall be provided in kitchens and science labs.

Fixed hose reels are not accepted for use in Trust academies.

10. Fire Safety Management

It is widely acknowledged that the facilities installed into a building for life safety will only be effective if it is adequately managed, maintained and monitored over the whole life of the building, and if those persons responsible for fire safety management are adequately trained to manage fire safety, and handle incidents. Good management is a key element of fire safety.

Effective management of fire safety can contribute to the protection of the building occupants in various ways by:

- working to prevent fires occurring in the first place
- being aware of the types of people in the building and any special risks or needs
- ensuring that all of the fire safety measures in the building are kept in working order, and in particular that the means of escape are always available
- training staff and organising the evacuation plan, to ensure that occupants leave quickly if a fire occurs
- taking command in the event of a fire until the fire and rescue service arrives

BS 9999:2017 Fire safety in the design, management and use of buildings – Code of practice identifies a number of management levels with a 'best practice' approach considered as Level 1, the highest category. With regard to the Trust estate, a Level 1 or equivalent system is deemed an appropriate benchmark to aim for.

The Regulatory Reform (Fire Safety) Order 2005 imposes a duty on those having responsibility for fire safety within occupied premises. Those responsible for fire safety management should help prevent fires occurring by creating an environment in which prevention is a priority and ensuring systems are put in place to deal with a small fire should one occur. It is essential that in the event of a fire, all fire safety provisions function as intended and all fire emergency procedures are implemented in order to facilitate appropriate action. Daily inspections are recommended to ensure these measures are available at all times. Such inspections should include checking that:

- Escape routes and final exits are kept clear and unobstructed
- Fire doors are kept closed and not obstructed
- Door locks, panic bars and automatic door release mechanisms operate effectively
- Fire safety signs and notices, fire extinguishers, manual call points and emergency escape lighting are not obstructed
- Storerooms are well-managed, and stock stored in appropriate locations

There should be an effective means of communication to document any deficiencies.

Fire safety audits should be carried out periodically to ensure these measures are being carried out. Fire Safety Management must be regarded as of equal importance to fire protection measures.

The managerial burden should be reduced as far as is reasonably practicable and engineered controls are preferable to those reliant on ongoing management.

The following reference documents have been prepared to support of the Trust's fire safety management system:

1. Academy Fire Risk Assessments
2. Trust Fire Safety and Health and Safety Policies
3. Trust Building Design Guides

Specific plans should be drawn up for all premises and should include:

- Developing and maintaining emergency plan(s) including Personal Emergency Evacuation Plans (PEEPs)
- Plans for the mitigation of potential environmental impacts of fire (water run off)
- Risk management, contingency planning, restart planning
- Contingency plans for salvage and damage control
- Hot work permits and procedural guidance
- Site specific plans for the fire service to use upon arrival
- Contractor procedural guidance including for system impairments

A log of contractors' attendance should be maintained so that at any one time the number and location of all personnel can be ascertained. Evacuation plans should include arrangements for visitor and contractor accountability whilst on site, escorting as required, and their safe evacuation. Evacuation procedures should be updated in line with this strategy and exercised at the earliest opportunity.

Planned, preventative inspection, maintenance and testing procedures should be established and used to ensure that all fire protection systems, including doors can operate effectively when required. Arrangements should be made for all fire safety equipment, installations and systems (including fire detection systems, door control mechanisms, emergency escape lighting, standby power systems, and all passive fire protection provisions) to be inspected and tested on a regular basis by a competent person.

Routine maintenance, inspection and testing for particular systems should be carried out in accordance with the relevant British Standards and by competent engineers.

In support of the fire safety management within academies, the following are required:

- To ensure that its Fire Policy and Fire Safety data reflect the current circumstances within the premises, records kept up to date, and changes are maintained.
- Ensure that effective monitoring and maintenance of all systems and procedures that support early warning of fire, means of escape and property protection takes place, in line with relevant Standards and guidance.

Arrangements are in place to monitor and maintain compartmentation including the requirement that no alterations take place or new services breach compartmentation without the permission of the landlord and that any alteration or reinstatement conforms to Building or other Regulations as appropriate, recommended guidance and best practice.

10.1 Fire Risk Assessments (FRAs)

The Regulatory Reform (Fire Safety) Order 2005 (the Order) places a duty on the 'responsible person' to take such general fire precautions to ensure, so far as reasonably practicable, the safety of his employees and other relevant persons as may reasonably be required, and to identify the need for preventative and protective measures as described in the Order. In order to identify those general fire precautions, the responsible person must make a suitable and sufficient assessment of the risks to which relevant persons are exposed.

All occupied buildings in the Trust estate will be the subject to a regular Fire Safety Risk Assessment by competent fire safety consultants approved by the Trust. The FRA frequency will be on a risk-based approach:

- Annually for boarding houses and academy buildings with integral occupied staff or pupil residential accommodation
- Biennially for other academy buildings, including detached residential accommodation for staff
- Triennially for lower risk premises, e.g. Trust Central Office

The Fire Risk Assessments for all buildings falling into the biennial or triennial categories will be reviewed in-house at least annually, and will particularly consider/include:

- Changes to the use of the building, activities taking place in the building, or the way the activities are organised, including the introduction of new equipment
- Alterations to the building(s), including the internal layout
- The introduction change of use or increase in the storage of hazardous substances
- Significant changes to the type and quantity and/or method of storage of combustible materials
- Significant changes in the occupancy levels

- A significant change in the mobility level or other factors influencing the response of students, visitors or staff in an emergency
- Changes to the management of the organisation
- A review of any failures of fire precautions, e.g. fire detection and alarm systems – to ensure any faults have been rectified
- A review of all staff training – to ensure it is up to date
- A review of all fire incidents, alarm activations and 'false' alarms - to ensure steps to prevent them reoccurring in the future have been taken
- A review of all fire drill records – to ensure any 'learning points' have been implemented
- A review of the fire records – to ensure all checks, tests and inspections are being completed properly at the relevant intervals and all equipment is in good working order
- Progress with the recommendations in the previous Fire Fisk Assessment

The outcomes of the review should be formally recorded.

10.2 Fire Logbook/Compliance Portal

All academies have relevant information and guidance and a provision for the recording of activity undertaken for the maintenance and testing of fire safety measures at individual academies. Academies should maintain the records to evidence both internal and external audits to demonstrate compliance. Where academies choose to maintain records in another medium e.g. electronically, the Trust Fire Safety Logbook template should be maintained.

The following infromation should be retained:

- The Trust Fire Safety Policy
- The Academy Evacuation Fire Safety Strategy
- The current Fire Risk Assessment and Action Plan, plus internal reviews when undertaken
- Information for each element of fire safety management e.g. Fire Detection and Alarm System, together with testing frequencies and requirements for staff and the competent contractor. In the case of fire detection and alarm systems, there should also be a 'cause and effect' matrix identifying all equipment design to operate in connection with the fire alarm system e.g. plant interfaces, door releases, etc
- Plans and schedules of fire safety equipment provided e.g. locations of fire alarm equipment, call points, emergency lighting units, portable firefighting equipment etc
- Records of ancillary fire safety provision testing and maintenance e.g. emergency exit door devices, kitchen extract system deep cleaning, curtains and drapes certificates, etc

10.3 Training

Any changes in procedures introduced as a result of this strategy, future strategies, structural or other changes affecting means of escape provision should be communicated to those responsible for fire safety management. Instruction and training should be delivered as required.

Training should be provided in line with Trust policy and local training needs analysis, informed by relevant policies, plans and procedures, Fire Risk Assessments and other relevant audit findings. Staff who have specific functions such as fire wardens and staff who manage evacuation, staff who are tasked with investigating fire alarm actuations and staff with specific task in relation to assisting mobility restricted people to escape, should receive specific training for these roles. To comply with Health and Safety legislation, all members of staff who would be expected to use fire or evacuation equipment e.g.an Evac+ Chair should have documented training and certification to demonstrate competency in their ability to use the chair.

The minimum information or training that should, as part of an induction, be given to new contractors or staff who access the premises is:

- The location and use of the escape routes from their working area(s)
- The method of raising the fire alarm in their working area (fire procedures)
- Any significant fire hazard or other hazard in their area of work
- Use of portable firefighting equipment
- Fire evacuation procedures
- Contact arrangements for site staff.

It is the responsibility of each academy to regularly provide fire safety information, briefings and training to all academy building occupants, users and affected persons, appropriate to their role and reason for being on the school premises; this includes undertaking regular fire evacuation drills (at least termly).

Type of Training	Staff	Time Scale	Refresher Frequency
Induction – Basic fire safety & prevention training and familiarisation with school's fire exits, fire drill and emergency evacuation procedures (In-house training)	All staff and contractors who are on site on a regular basis	First day	
Refresher on school's emergency evacuation procedures (In-house training)	All staff and contractors who are on site on a regular basis		Annually
Fire safety and fire prevention (In-house training)	All staff and contractors who are on site on a regular basis	First term	Annually
Fire safety - testing of alarms, call points & emergency lighting and checks on fire safety equipment (e.g. fire extinguishers) and features (e.g. fire doors and escapes routes) (In-house training)	Premises / Facilities Manager and Premises staff	As soon as given the role	As and when new equipment or procedures are introduced
Firefighting - use of extinguishers & fire blankets (Practical training)	DFO, premises team, fire marshals, catering staff, science staff, art dept. staff, DT dept. staff, food technology dept. staff, boarding staff	As soon as given the role	5 years
Fire Safety for Fire Marshals (Half day course)	Nominated staff	As soon as given the role	

Each academy's training needs analysis and programme should be included in the relevant section of the Fire Safety Logbook, together with a record of all staff who have received training, and the course or training event information. Staff training should include health and safety-related training specific to fire hazards within the academy associated with teaching or management e.g. Gas Brazing equipment, Laser Cutters, 3-D printers, hazardous substances, etc.

The Trust Central Office will undertake a review of training needs appropriate to its own staff who have responsibilities under the Order and/or who provide technical support to academies within the Trust. Those having responsibility include members of the Board of Trustees and the Chief Executive Officer and others with delegated responsibility.

All staff should receive structured fire safety training on a periodic basis to include inset days. The subject matter and those who received the training should be recorded. Access is available to schools to training materials provided by the Trust.

10.4 Event Management

It is the responsibility of each academy to ensure all events occurring on academy premises are appropriately assessed, managed and follow the correct procedures for fire safety. Events include, but are not limited to: Open days, Sports days, Parents' evenings, Drama productions, Concerts and musical events, Exhibitions, Speech day, Careers events, Summer fetes and Christmas festivities , Bonfires and firework displays, Dinners and BBQs, Discos and balls, Quiz nights, etc.

Event management will include the requirement to follow any detailed guidance, including occupancy capacity and fire safety management arrangements, identified in Fire Risk Assessments. Particular attention is drawn to the requirement to provide and maintain means of escape, and to ensure that fire risk is not increased or imported through the addition of combustible materials into the venue or ignition sources e.g. Third party equipment. All Third Party equipment must have valid PAT testing certification.

11. Business Continuity - Resilience Planning

Each individual academy is required to produce and maintain its own Business Continuity Plan (BCPs). BCPs are intended to identify those measures required to reduce the likelihood of the loss of organisational capability as well as reduce the potential disruptive impact of an event, and aide the earliest possible restoration of normality. As well as protecting the significant financial assets within the estate, effective business continuity planning could also reduce the potential negative impact on the academic work e.g. exam facilities and course work produced by students, and limit reputational damage that might result from a major incident.

Business Continuity Planning requires academies to assess any and all risks that can affect its operations, including fire. Once those risks have been identified the business continuity plan should set out the following:

- to define those risks that can affect academy operations
- to determine how those risks will affect operations
- to identify safeguards and procedures to mitigate those risks
- to implement safeguards and procedures
- to test procedures to ensure they work
- to review the process to maintain its currency
- to promulgate relevant information to staff

This Policy will support acadmies in planning and control through the effective assessment of active and passive fire protection measures, coupled with risk reduction measures that can both reduce the likelihood and extent of any fire within the estate through its early detection and restricting fire spread through the provision of compartmentation, and where appropriate, fire suppression systems. In identifying risks, academies should consider high-value assets within the process, both monetary and organisational, such as servers and hubs.

As part of any future design project for new build or refurbishment projects, liaison will be required between the Trust representatives and the academy in order to ensure that Business Continuity Plans and procedures, as well as fire risk assessment methodologies are applied to identify those additional measures required to reduce the potential and extent of business interruption in the event of a fire, as well as protect key assets.

12. Fire Prevention

The incorporation of fire prevention measures in the design stage can have significant benefits rather than attempting to apply such measures after completion. There may well also be cost benefits to designing in such features, not only in regard to installation costs, but after completion in the form of reduced insurance charges. Input at the design stage from an experienced fire safety professional or fire engineer may well have significant benefits.

Prevention Objectives

- Mitigating the effects of fire by proper design, construction, arrangement and use of buildings
- Maintaining a suitable and sufficient Fire Risk Assessment process
- Appointing competent persons to assist in carrying out fire prevention measures and allocating responsibilities to Key Duty Holders
- Carrying out regular inspections of all premises to identify fire hazards and risks
- Providing relevant fire safety information and training, including regular fire drills to persons occupying, working in and visiting all Trust premises
- Ensuring all fire safety and electrical and mechanical equipment is regularly maintained, serviced, checked, tested and inspected to ensure it is good working order and appropriate records made and held on-site
- Employing processes to ensure flammable products are substituted for less flammable products where appropriate
- Managing specific risks that increase the risk of fire, e.g. hot work

As stated in the Trust Health and Safety Policy, all members of staff have a legal duty to take reasonable care for their own health and safety as well as other persons who may be affected by their actions. That duty of care extends to making themselves aware of the fire safety equipment, policies and procedures in place, and not interfering or misusing any equipment provided for their safety or that of their colleagues, pupils and visitors.

The most effective component of fire safety in each academy is **prevention** - avoidance rather than intervention after an incident occurs. Teachers and other staff are key to ensuring that fire safety provisions are properly looked after and any activities that have a degree of fire risk, carefully managed. For example, where fire safety equipment is found to be damaged or out of place, escape routes compromised by poor storage or inappropriate arrangements of desks and other items, poor housekeeping, out of date electrical test labels, etc. these should be addressed immediately and reported.

The Trust and academies will provide relevant and timely information and training in order that staff and pupils can perform their assigned roles and responsibilities under the legislation, estate and site specific policies.

12.1 Housekeeping

Housekeeping is a particularly important aspect of fire prevention. As such, it warrants particular mention in this document. There are two primary aspects to housekeeping: reducing the chances of a fire starting or developing and maintaining the availability of escape routes. Each academy shall ensure systems and work practices exist which will seek to prevent a fire through:

- keeping combustible materials separate from possible ignition sources
- storing flammable liquids, paints and solvents in appropriate containers
- recognition of potential hazards and the mitigation of the fire risk associated with these
- monitoring proper waste control (including waste bins)
- checks on electrical circuit over-load
- clearing waste from the outside of the building
- ensure cleaners and materials cupboards are tidy and secured at all times
- ensuring that material and equipment is not stored in such a way that it materially hinders escape routes
- A daily inspection of discrete parts of the building shall be carried out after closing to ensure that the areas are left in a safe condition
- Non-essential electrical services shall be turned off at the mains. Any gas-fire equipment that is not equipped with flame supervision devices should be turned off
- The use of portable electrical appliances (including extension leads and adaptors) shall be in line with the Trust policy and staff must not bring in their own portable electrical appliances to use in the academy
- any other routine precautions that are deemed necessary

12.2 Lockers

The management of pupil bags and other items on escape routes can be challenging within academy premises. The provision, distribution and type of locker provided for pupil use can materially affect fire safety within academies by limiting the potential for escape routes to be compromised and by managing fire loading. In conjunction with users, new build or refurbishments will have external locker provision, or lockers will be located in areas other than escape routes. Regardless of the location, lockers will be manufactured from materials of limited combustibility and will be provided with sloping tops to prevent items being stored externally.

12.3 Arson Prevention

As a consequence of their location and operational environment, academies cannot be considered to be a wholly secure environment. While there is always the potential threat of arson due to the nature of the business, there have historically been few incidents of arson or anti-social behaviour documented across the estate.

Security from the threat of arson will be considered during the design phase of any new project. Advice and information will be sought from Trust risk managers and external security professionals as appropriate in order to reduce the opportunity and likelihood of arson, through practical means. The Trust will use the Secured by Design Schools guidance produced by ACPO SBD as the basis for consideration of security and arson prevention requirements in new buildings and major refurbishments within the estate.

Where CCTV is to be provided for security purposes, consideration shall be given to using upgraded Infra-Red enhanced cameras that give better night-time vision, where possible.

Access control will be provided to all new buildings and major refurbishments within the estate.

Each academy should ensure that all staff are aware of the control measures, policies and procedures in place to reduce the threat of arson. Where security staff are employed by an academy, they should be also being made aware of control measures, policies and procedures in place to reduce the threat of arson.

13. Change Control

13.1 Competent Persons

Under the Order, the Responsible Person is charged with ensuring that Competent Persons are used. It is therefore important to unambiguously specify the standard of workmanship required for installers, maintainers and reactive contractors. This must include any external consultants that conduct any design elements and fire risk assessments etc.

Confidence at the required level of performance can be achieved will be demonstrated by the use of a system, material, product or structure, which is provided under the arrangements of a product conformity certification scheme and an accreditation of installers scheme. Many certification bodies which approve such schemes are accredited by UKAS. Although there is currently no legal requirement for Third Party Accreditation and Certification for structural fire safety components, Building Regulations state:

''Since the performance of a system, product, component, or structure is dependent upon satisfactory site installation, testing and maintenance, independent schemes of certification and registration of installers and maintenance firms of such will provide confidence in the appropriate standard of workmanship being provided. Third party accreditation provides a means of ensuring that installations have been conducted by knowledgeable contractors to appropriate standards, thereby increasing the reliability of the anticipated performance in fire''.

Installers should be Third Party certified to install the specific product / system when an appropriate scheme is available. For example, the BRE/LPCB scheme LPS 1531 covers the requirements for the approval and listing of companies installing or applying the following passive fire protection products:

- Penetrations, Cavity Barriers and Linear Gap Seals
- Fire Rated Board and Cladding to Steels
- Intumescent Coatings to Structural Elements
- Fire Rated Spray Materials
- Fire Rated Ductwork Systems
- Fire Resisting Dampers; and
- Fire Resistant Compartment Wall Systems

The alternative to Third Party Accreditation schemes to guarantee competent installations is by using inspection and auditing services to guarantee that fire safety components are being installed competently to the required standard of workmanship. Suitable organisations include BRE, Warrington Certification, BM TRADA and the BWF.

In order to give confidence in performance, all fire protection products and systems shall be installed by adequately trained specialist installers, third party certified when an appropriate scheme is available.

Monitoring and Review of this Policy

The Trust shall be responsible for reviewing this policy from time to time to ensure that it meets legal requirements and reflects best practice.

Appendix 1

Limitations

British and other standards / documents that may be referred to in this assessment

Reference should always be made to the current version of these standards

BS 5266:

Part 1:

Part 8: Emergency lighting

Code of Practice for the emergency lighting of premises

Emergency escape lighting systems

BS 5306:

Part 3:

Part 8: Fire extinguishing installations and equipment on premises

Commissioning and maintenance of portable fire extinguishers. Code of Practice

Selection and positioning of portable fire extinguishers. Code of Practice

BS 5839:

Part 1:

Part 6: Fire detection and alarm systems for buildings

Code of Practice for system design, installation, commissioning and maintenance

Code of Practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings

BS 7671: Requirements for electrical installations. IET Wiring Regulations

BS 8214: Code of Practice for fire door assemblies

BS 9991: Fire safety in the design, management and use of residential buildings. Code of Practice

BS 9999: Code of Practice for fire safety in the design, management and use of buildings

BS EN 1125: Building hardware. Panic exit devices operated by a horizontal bar, for us on escape routes. Requirements and test methods.

BS EN 12845: Fixed firefighting systems. Automatic sprinkler systems. Design, installation and maintenance

BS ISO 3864:

Part 1:

Part 3: Graphical symbols. Safety colours and safety signs

Design principles for safety signs and safety markings

Design principles for graphical symbols for use in safety signs

BS EN ISO 7010: Graphical symbols. Safety colours and safety signs. Registered safety signs

BS EN 15004:

Part 1: Fixed firefighting systems. Gas extinguishing systems

Design, installation and maintenance

TR/19 Guide to good practice - internal cleanliness of ventilation systems

Building and Engineering Services Association (BESA)

RC44 Recommendations for fire risk assessment of catering extract ventilation

RISCAuthority. Available to download free of charge from www.riscauthority.co.uk

Further guidance on fire safety risk assessment is available from the Communities and Local Government web site: www.gov.uk/workplace-fire-safety-your-responsibilities/fire-safety-advice-documents