



Fire Risk Assessment Report

| | |
|---------------------------|--|
| Company | St Augustine's Priory – Science Block |
| Site Address | Hillcrest Rd, London W5 2JL |
| Contact details | 020 8997 2022 Bursar J Powell |
| Date of Assessment | 10 th and 29 th October 2018 site visits |
| Date of Report | 2 nd November 2018 |
| Consultant | Jo Banks GradIOSH MIIRSM 07960152675 |

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EXECUTIVE SUMMARY

Overview

On inspection there were some minor fire hazards identified.

These were mainly concerned with chemicals not being stored in sealed cabinets and being stored on open shelving. The science block storage areas were full, and the siting of the computer server has taken up the available large cupboard space.

Fire Risk Assessment –St Augustine’s Priory Science Block Compliance Summary – 29.10.2018

| | No. of Actions | | No. of Actions |
|-------------------------------|----------------|-------------------------------|----------------|
| 1. Management of fire safety | Satisfactory | 8. Means of Escape | Satisfactory |
| 2. Sources of ignition | 1 | 9. Compartmentation | 2 |
| 3. Sources of fuel | 1 | 10. Signs and notices | Satisfactory |
| 4. Sources of Oxygen | Satisfactory | 11. Fire safety plan | Satisfactory |
| 5. People at risk | Satisfactory | 12. Information & instruction | 1 |
| 6. Fire detection and warning | Satisfactory | 13. Fire prevention | Satisfactory |
| 7. Fire fighting equipment | Satisfactory | | |

| | |
|-----------------------|---|
| Urgent | Where a situation exists that poses an imminent risk to life safety and would probably be subject to the issuing of a prohibition notice or prosecution by the enforcing authority. These matters require immediate action. |
| High | Where a situation exists that is likely to involve contravention of legislation that could lead to fatal or other serious injury and would probably be subject to the issuing of an enforcement notice by the enforcing authority. |
| Medium | Where a situation exists that is likely to involve contravention of legislation that could lead to injury and would probably be subject to the issuing of a letter of deficiencies by the enforcing authority. |
| Low | Where a situation exists that although enforcement action is unlikely, accidents or property damage is possible. The remedial actions are improvements, precautions or policy that will ensure full conformance to fire safety legislation. |
| Recommendation | Where a situation exists that may arguably meet legislative requirements but is not to current best practice and may still pose a risk of injury or damage. |

| | |
|---------------------|--|
| Satisfactory | Arrangements which are compliant with legislation and best practice. |
|---------------------|--|

Overall Fire Risk

| | |
|------------------|--|
| Tolerable | No major additional controls required. However, there may be a need for consideration of improvements that involve minor or limited cost. |
|------------------|--|

INTRODUCTION

As part of the Service to St Augustine’s Priory Jo Banks BSc GradOSH, MIIRSM of Arinite Ltd conducted a comprehensive inspection and subsequent Fire Safety Risk Assessment of the Science block on 29/10/2018.

Objective

The objective of the inspection and risk assessment was to assist the Company in meeting its duties to carry out an assessment of workplace safety and health risks under the:

- The Management of Health and Safety at Work Regulations 1999.
- The Regulatory Reform (Fire Safety) Order 2005.

Compliance with these duties may be routinely checked by the Fire Authority, or as the result of a fire related incident. The Company insurer will also require a suitable and sufficient risk assessment to be undertaken and any failings in fire safety measures may invalidate an insurance claim in the event of a fire.

Fire Safety Management

The overall aim of fire safety management is to identify and implement fire risk control measure with the aim of preventing fires, saving lives and preventing business loss as shown in figure 1.

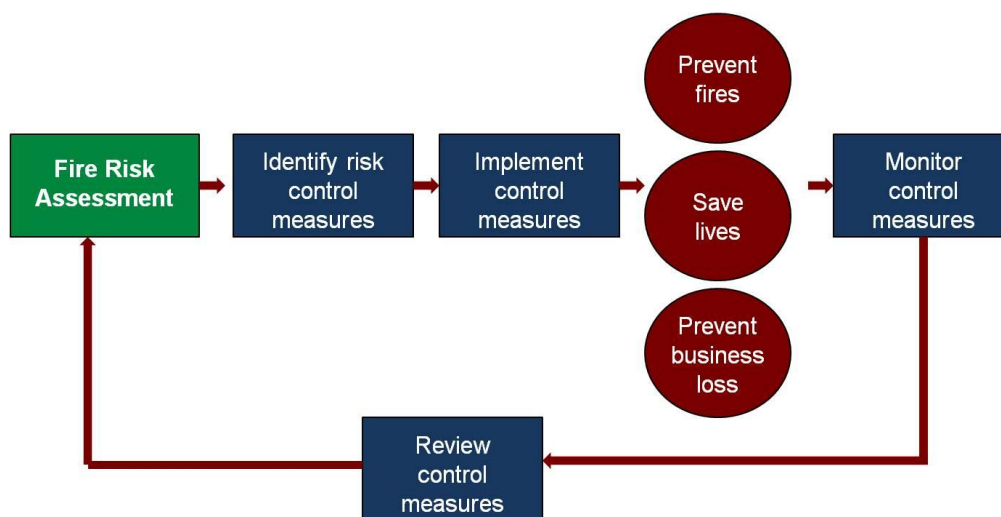


Figure 1

Limitations of the Assessment

In general, the structural features of the premises and those that were hidden from open view, e.g. ceiling voids, service ducts, etc., may not have been subject to inspection during this fire risk assessment. The Responsible Person has a duty for ensuring that appropriate inspection and maintenance of the structural aspects of the buildings, including the above, is carried out.

It is important to note that the assessment cannot guarantee to cover every aspect of all likely risks. The comments are based on observations and discussions undertaken by Arinite Ltd at the time of a visit.

FRA Inspection and Review

This risk assessment should be available for inspection or validation by any authorised person and should be reviewed and updated:

- Following a change of work practice.
- Following a significant increase of staffing levels.
- Following any structural or material change to the premises or processes conducted.
- Following any change to the fire precautions in the premises.
- Following a significant near miss or fire incident.
- At recommended intervals of no more than twelve months.

Numbers of People and Type of Work Undertaken at Premises

Modern purpose -built science block with exceptional classroom facilities and pleasant ambience.

Science Dept : where the Head of Science keeps risk assessments for all experiments, and the use and storage of equipment. COSHH assessments and CLEAPSS Hazcards are kept on the use and safe storage of all chemicals. The Science Department keeps records of all subject-specific training by teachers and technicians.

Description of Site

Purpose built Science block. One passenger Lift, one main staircase. Traditional brick and tile construction.



Priorities for Action

To assist in the decision-making process, colour-coded priorities for action have been assigned in the reports to enable management to differentiate between critical necessities and desirable requirements.

| | |
|-----------------------|---|
| Urgent | Where a situation exists that poses an imminent risk to life safety and would probably be subject to the issuing of a prohibition notice or prosecution by the enforcing authority. These matters require immediate action. |
| High | Where a situation exists that is likely to involve contravention of legislation that could lead to fatal or other serious injury and would probably be subject to the issuing of an enforcement notice by the enforcing authority. |
| Medium | Where a situation exists that is likely to involve contravention of legislation that could lead to injury and would probably be subject to the issuing of a letter of deficiencies by the enforcing authority. |
| Low | Where a situation exists that although enforcement action is unlikely, accidents or property damage is possible. The remedial actions are improvements, precautions or policy that will ensure full conformance to fire safety legislation. |
| Recommendation | Where a situation exists that may arguably meet legislative requirements but is not to current best practice and may still pose a risk of injury or damage. |
| Satisfactory | Arrangements are compliant with legislation and best practice. |

Note: To ensure full compliance with the requirements of current legislation, all identified tasks should be rectified at the earliest opportunity.

Acknowledgment: Arinite Ltd would like to express their appreciation for the help given by Jonathan Powell.

Action Plan St Augustine's Science Block FRA 29.10.2018

| Ref Date | Location/ Subject | Fire Hazard | Risk | Persons at Risk | Priority | Action Required | Completion or target date | Owner |
|----------|----------------------|-------------|------|--------------------|----------|-----------------|---------------------------------|-------|
|----------|----------------------|-------------|------|--------------------|----------|-----------------|---------------------------------|-------|

Live Actions 2018 Inspection

| | | | | | | | | |
|-----------|----------------------------------|--|--|-----|---|--|--|--|
| 001/10/18 | Science Block | <p><u>Source of ignition</u> <u>PAT testing</u> Untested electrical items</p> | Fire starting | all | L | Portable appliance testing in all areas to be checked and prioritised, many items untested. Testing can be completed in house and two staff available for testing. | | |
| 002/10/18 | Tech rooms and classrooms | <p><u>Fuel source</u> Chemicals stored on open shelving in glass and plastic bottles.</p> | Fuel for a fire | all | L | Actively monitor and manage these areas day to day. Appropriate storage for all flammables and chemicals must be provided. Head of science responsible for this area. | | |
| 003/10/18 | Loft Void areas Fire Doors | <p><u>Compartmentation</u> All loft and void space areas should be checked by maintenance team for fire stopping and unnecessary storage. Fire doors were found to be ill fitting in some areas. Adjust and improve.</p> | Fuel for a fire Fire and smoke spread | all | M | Survey all loft and void areas for fire stopping and storage. Arrange Fire door inspections monthly. All fire doors to be continually appraised and routinely maintained by in house team. Consider fire door audit for the main building, clockhouse and science block. | | |
| 004/10/18 | All | <p><u>Training and instruction</u> New staff join regularly. Ensure all new staff have a proper safety induction and fire training. All staff take part in termly fire drill.</p> | Delay in evacuation | all | L | Ensure new entrants are trained immediately as they join the school. Online training or face to face fire training as appropriate. Bursar to arrange suitable training. | | |

Arinite. Fire Risk Summary St Augustine's Science Block building

FRA 29.10.2018

1 Considering the fire prevention measures observed at the time of the risk assessment, it is considered that the hazard from fire (probably of ignition) at these premises is:

Low

2 Considering the nature of the premises and occupants, as well as the fire protection and procedural arrangements observed at the time of the risk assessment, it is considered that the consequences for life safety in the event of fire would be:

Harmful

3 Accordingly, it is considered that the risk to life from fire at these premises is:

Moderate

| | | Potential consequences of fire: | | |
|----------|----------------------------------|---------------------------------|------------------|-------------------|
| | | Slightly harmful | Harmful | Extremely harmful |
| 1 | Fire hazard (probability) | | | |
| | Low | Trivial risk | Tolerable risk | Moderate risk |
| | Low – Medium | Tolerable risk | Moderate risk | Substantial risk |
| | Medium | Tolerable risk | Moderate risk | Substantial risk |
| | High | Moderate risk | Substantial risk | Intolerable risk |

| | | Potential consequences of fire: |
|----------|--------------------------|---|
| 2 | Slightly harmful | Outbreak of fire very unlikely to result in serious injury or death of any occupant. |
| | Harmful | Outbreak of fire could result in harm to one or more occupants, but it is unlikely to result in serious injury or death of any occupant; any such injury or death is unlikely to involve multiples of people. |
| | Extremely harmful | Potential for serious injury or death of one or more occupants. |

A suitable risk-based control plan should involve effort and urgency that is proportional to risk. The following risk-based control plan is based on one advocated by BS8800¹ for general health and safety risks.

| | | Risk level | Action and timescale |
|----------|--|-----------------|--|
| 3 | | Trivial | No action is required, and no detailed records need to be kept. |
| | | Tolerable | No major additional controls required. However, there may be a need for consideration of improvements that involve minor or limited cost. |
| | | Moderate | It is essential that efforts be made to reduce the risk. Risk reduction measures should be implemented within a defined period. Where moderate risk is associated with extremely harmful consequences, further assessment may be required to establish more precisely the likelihood of harm as a basis for determining the priority for improved control measures. |
| | | Substantial | Considerable resources may have to be allocated to reduce the risk. If the building is unoccupied, it should not be occupied until the risk has been reduced. If the building is occupied, urgent action should be taken. |
| | | Intolerable | Building (or relevant area) should not be occupied until the risk is reduced. |

¹ BS8800: 2004 Guide to occupational health and safety management systems

Note that although the purpose of this section is to place the fire risk in context, the above approach to risk assessment is subjective and for guidance only. All hazards and deficiencies identified in this report should be addressed by implementing all recommendations contained in the previous section. The risk assessment should be repeated periodically.

1. Management of Fire Risks

| | | |
|---|---|---|
| <u>Overview:</u> There were good practical arrangements in place. There were good passive and active fire protection measures. There was an escape strategy that has been practiced every term. Areas of the school like voids, fire doors and loft areas should be continually appraised for compartments and fire stopping. | | |
| 1 | Has a Responsible Person been appointed? | St Augustine's Priory Head teacher Private school |
| 2 | Does the Responsible Person have sufficient knowledge about their duties? | Y |
| 3 | Has a Competent Person been appointed? | Arinite Ltd |
| 4 | Does the Competent Person have sufficient knowledge about their duties? | Y |
| 5 | Has an incident controller/s been appointed? | Y Bursar |
| 6 | Have the Incident Controller/s sufficient knowledge about their duties? | Y |
| 7 | Has a previous fire risk assessment been carried out by the client? | Y |
| 8 | Was the clients Fire Risk Assessment available to view? | Y |
| 9 | Has a previous fire risk assessment been carried out by a landlord? | NA |
| 10 | Was the landlord's Fire Risk Assessment available to view? | NA |
| 11 | Are floors plans available? | Y |
| 12 | Do floor plans indicate the location of all fire safety systems and equipment? | N |
| 13 | Do floor plans indicate emergency escape routes and final exit doors? | Y |
| 14 | Would the floor plans be accessible by the emergency services if needed urgently? | Y |

2. Sources of Ignition

| | | |
|---|--|---|
| <u>Overview:</u> The site was a no smoking area. All equipment was subject to a maintenance programme, including portable electrical appliances which were tested by employees. This program had fallen behind schedule. The Technicians store room housed the school IT server in a large cupboard. It was felt this could be better sited elsewhere giving back vital secure storage space. | | |
| 1 | Is the workplace free of? | |
| | • Electrical, gas, oil heaters, room heaters, portable heaters? | N |
| | • Extract fans for dust and fumes removal (e.g. build-up of debris)? | N |
| | • Heat sources, e.g. gas, electric, microwave ovens? | N |

Fire Risk Assessment Checklist –St Augustine’s Science Block 29th October 2018

| No. | Requirement | Y/N/NA/Comments |
|-----|--|-----------------|
| | <ul style="list-style-type: none"> Poor electrical installations (overloads, bunched or damaged cables)? | Y |
| | <ul style="list-style-type: none"> Light fittings and lighting equipment (e.g. halogen lamps, display lighting, products stored too close to lighting, etc.)? | Y |
| 2 | Is the workplace free of any indications of near misses, e.g. scorch marks on furniture or fittings, discoloured or charred electrical plugs, cigarette burns, etc. | Y |
| 3 | Have all potential sources of ignition been identified? | Y |

3. Sources of Fuel

| | | |
|---|--|---|
| <p><u>Overview:</u> The general standard of housekeeping was good in all areas. Care should be taken with artworks and displays in exit corridors and fire scape stairwell. Too many flammable items and pieces of Art in the escape routes. Chemical storage was in place in the technician’s room but more lockable cabinet space was required. There were chemicals on open shelving units in plastic and glass bottles.</p> | | |
| 1 | Is the workplace free of combustible materials? | N |
| 2 | Is the workplace free of flammable liquids, chemicals and gases? | N |
| 3 | Is the workplace free of other sources of fuel? | N |
| 4 | Have all potential fuel sources been identified? | Y |

4. Sources of Oxygen

| | | |
|---|--|---|
| <p><u>Overview:</u> No significant hazards were identified.</p> | | |
| 1 | Is the workplace free of natural air flows, e.g. open doors and windows? | Y |
| 2 | Is the workplace free of mechanical systems, e.g. air conditioning? | N |
| 3 | Is the workplace free of additional sources of oxygen? | N |
| 4 | Have you identified all potential sources of oxygen? | Y |

5. People at Risk

| | | |
|---|--|--|
| <p><u>Overview:</u> The school premises are open to the public therefore fire arrangements covered pupils, employees, visitors, volunteers, cleaners and contractors. Pupils, Visitors, volunteers, staff and contractors may have mobility, sensory and or cognitive impairments. They may be dependent upon medication, prescription or otherwise. As the premises are open to the public people may range in age from very young to older persons. Ensure all special needs are considered in escape plans and all times of operation. A person with limited mobility may need rescue from the upper floor if the lift failed or there was a fire emergency. Currently there are no active PEEPS in place. Regular contractors like the kitchen staff should supply details of own company fire safety training.</p> | | |
|---|--|--|

Fire Risk Assessment Checklist –St Augustine’s Science Block 29th October 2018

| No. | Requirement | Y/N/NA/Comments |
|-----|--|-----------------|
| 1 | Employees | Y |
| 2 | Residents | N |
| 3 | Visitors / contractors | Y |
| 4 | Lone workers, e.g. cleaners, security staff | Y |
| 5 | People with disabilities (personal emergency evacuation plans – PEEPS – may be required) | Y Possible |
| 6 | Other people in the immediate vicinity of the premises | Y |

6. Fire Detection and Warning Systems

| | | |
|---|--|------|
| <u>Overview:</u> Smoke and heat detection was in place. There were appropriate emergency switches for the gas taps. Emergency lights tested by caretaker and recorded. Fire engineering company service the fire alarm and carry out the main annual emergency light test. No detail of alarm specification seen. | | |
| 1 | Is there a fire detection system? Is it for: | |
| | • Smoke? | Y |
| | • Heat? | Y |
| | • Other? | N |
| 2 | Is there a fire alarm/warning system? | Y |
| 3 | Is there an effective procedure in place for full or phased evacuation? | Full |
| 4 | Are there adequate break-glass points? | Y |
| 5 | Can the means of warning be clearly heard by everyone throughout the whole building? | Y |
| 6 | Is the alarm regularly tested? If yes, how? | |
| | Activated from main control panel? | Y |
| | Individual break glass boxes? | Y |
| 7 | Is there a fire log book? | Y |
| | If so, is it up to date? | Y |
| 8 | Are six-monthly inspections of the detection and warning systems conducted? | Y |

7. Fire Fighting Equipment and Facilities

| | | |
|---|---|---|
| <u>Overview:</u> There were primarily carbon dioxide and water extinguishers. A contract was maintained for annual servicing. | | |
| 1 | Are there portable fire extinguishers containing? | |
| | a) Water? | Y |
| | b) Carbon dioxide? | Y |
| | c) Dry powder? | N |
| | d) Foam? | Y |
| | e) Wet chemical? | Y |
| | f) Fire blankets? | Y |

Fire Risk Assessment Checklist –St Augustine’s Science Block 29th October 2018

| No. | Requirement | Y/N/NA/Comments |
|-----|---|-----------------|
| 2 | Are there enough extinguishers sited throughout the premises at appropriate locations? | Y |
| 3 | Are the right types of extinguishers located close to the fire hazards? | Y |
| 4 | Are the extinguishers visible or does their position need indicating? | Visible |
| 5 | Are fire extinguishers: | |
| | • In good condition, checked and “in date”? | Y |
| | • Fixed to a wall or fire point/stand? | Y |
| 6 | Are members of staff trained to use them? | Y |
| 7 | Have steps been taken to prevent the misuse of extinguishers? | Y |
| 8 | Is there a fixed fire fighting installation? | N |
| 9 | Is all the fire fighting equipment periodically checked by a competent person to ensure operation? | Y |
| 10 | Are those who maintain and test fire protection systems BAFE (British Approvals for Fire Equipment) registered? | Y |

8. Means of Escape

| | | |
|--|---|--------|
| <u>Overview:</u> The escape strategy was full evacuation from all areas. Rescue chairs or an evacuation sledge would be required to evacuate an immobile or injured staff member or pupil from the upper floors. | | |
| 1 | Are six-monthly fire drills conducted? | Termly |
| 2 | Can all the occupants escape to a place of total safety in a reasonable time? | Y |
| 3 | Are escape routes suitable? | Y |
| 4 | Are escape routes properly signed? | Y |
| 5 | Are escape routes kept clear always? | N |
| 6 | How many exit routes are available? | 1 |
| 7 | Do the doors on escape routes open in the direction of escape (if necessary)? | Y |
| 8 | Are all escape routes covered by an acceptable form of emergency escape lighting? | Y |
| | Have notices been provided giving information on: | |
| | • how to operate security devices on exit doors? | Y |
| | • doors enclosing fire hazards that must be kept shut? | Y |
| 9 | • fire action notices? | Y |
| | Is the emergency lighting regularly checked/tested to ensure operation? | Y |
| 10 | Are records for checking (function and durability) emergency lighting maintained and available? | Y |
| 11 | Are safe refuges available? | Y |
| 12 | | |

Fire Risk Assessment Checklist –St Augustine’s Science Block 29th October 2018

| No. | Requirement | Y/N/NA/Comments |
|-----|--|-----------------|
| 13 | Has a safe means of escape been provided for disabled persons in the event of an emergency? | NA |
| 14 | Has suitable specialist evacuation equipment, e.g. Evac Chairs, been provided where necessary? | NA |
| 15 | Can lifts be used in an emergency? | N |
| 16 | Is there adequate means of ventilation for smoke clearance? | Y |

9. Compartmentation

| | | |
|--|--|---|
| <p><u>Overview:</u> All void areas and loft spaces should be checked for fire stopping and unnecessary storage. These areas should be sterile and clear. Fire doors need continual monitoring and a monthly inspection of all doors should be carried out by maintenance or the staff from the department. An appropriate workplace inspection schedule has been provided and should be monitored by the bursar. Arinite advise repairing faulty doors dynamically to reduce compartmentation breach risk.</p> | | |
| 1 | Are all fire doors in good condition and fit correctly? | N |
| 2 | Do all self-closing devices on doors operate effectively? | N |
| 3 | Are fire doors periodically inspected? | Y |
| 4 | Has a competent person carried out a structural survey? | N |
| 5 | Is the workplace free of any visible places where smoke and flames can spread from one compartment to another? | N |

10. Signs and Notices

| | | |
|--|---|---|
| <p><u>Overview:</u> Appropriate directional signs and notices were in place. Emergency lighting was at high level and difficult to replace bulbs, consider lower level replacement for ease in future.</p> | | |
| 1 | Where necessary, are escape routes and exits, the locations of fire fighting equipment and emergency telephones indicated by appropriate signs? | Y |
| 2 | Is the signage visible and of pictogram style? | Y |
| 3 | Are all the necessary signs and notices being maintained so that they continue to be correct, legible and understood? | Y |

11. Fire Safety Plan

| | | |
|---|--|--|
| <p><u>Overview:</u> There was a fire safety plan in place. The pupils and employees participate in planned evacuation drills each term.</p> | | |
| 1 | Is there a documented fire safety plan? | Y |
| 2 | If yes, is it appropriate? | Basic plan is adequate. All staff are considered fire marshals. |
| | Does the fire plan include information on: | |
| | • Fire prevention? | |
| | • Fire warnings/alarms? | |
| | • Alarm tests? | |
| | • Evacuation procedure? | |

Fire Risk Assessment Checklist –St Augustine’s Science Block 29th October 2018

| No. | Requirement | Y/N/NA/Comments |
|-----|---|---|
| | <ul style="list-style-type: none"> • Emergency lighting? | Staff to lead pupils and visitors to place of assembly. |
| | <ul style="list-style-type: none"> • Lighting tests? | |
| | <ul style="list-style-type: none"> • Disabled persons? • Terrorist activities? • Visitors? • Fire suppression/fighting? • Staff training? • Periodic review of risk assessment? | N |

12. Information and Instruction

| | | |
|--|--|---|
| <p><u>Overview:</u> All staff had received fire training as part of the induction process. Employees were informed of the fire emergency procedures on induction. Whole school fire safety training for all teachers and support staff has been offered by Arinite and could be completed in 2018/9. Three drills per year, one per term organised. All out in 3 minutes is the normal target.</p> | | |
| 1 | Have staff and visitors, etc. been informed about what do to in an emergency? | Y |
| 2 | How are they currently informed? | |
| | <ul style="list-style-type: none"> • Induction | Y |
| | <ul style="list-style-type: none"> • Fire Policy | Y |
| | <ul style="list-style-type: none"> • Staff Handbook | Y |
| | <ul style="list-style-type: none"> • Fire Action Notice | Y |
| | <ul style="list-style-type: none"> • Visitor’s badge | N |
| | <ul style="list-style-type: none"> • Personal Emergency Evacuation Plan | N |
| 3 | Have staff received basic fire training? | Y |
| 4 | Have fire wardens been trained? | Y |
| 5 | Are employees aware of specific tasks if there is a fire? | Y |

13. Fire Prevention

| | | |
|--|---|---|
| <p><u>Overview:</u> There were maintenance programmes and systems in place for electrical systems, plant and equipment. The activities of contractors were controlled. Gas safety record checks were held by the Bursar. The head of Science kept the risk file and COSHH records.</p> | | |
| 1 | Are all items of electrical equipment maintained, serviced and inspected regularly? | Y |
| 2 | Are extension leads/adaptors being used safely? | Y |
| 3 | Is the wiring of the electrical installation periodically inspected? | Y |
| 4 | Are air-conditioning systems maintained, serviced and inspected? | Y |
| 5 | Are boilers and heating systems maintained, serviced and inspected? | Y |

Fire Risk Assessment Checklist –St Augustine’s Science Block
29th October 2018

| No. | Requirement | Y/N/NA/Comments |
|-----|--|-----------------|
| 6 | Are contractors managed – hot working, etc? | Y |
| 7 | Are periodic housekeeping inspections conducted? | Y |
| 8 | Will building security reduce arson attacks? | Y |

**Fire Risk Assessment Checklist –St Augustine’s Science Block
29th October 2018**

| No. | Requirement | Y/N/NA/Comments |
|-----|-------------|-----------------|
|-----|-------------|-----------------|

14. Conclusion

| | |
|--|--|
| What is the most likely cause of a fire? | Arson, Kitchen fire, electrical fault. |
|--|--|

Estimated time lapse before the fire is detected:

| | |
|----------------------------------|-----------|
| Normal working hours | Immediate |
| Out of hours (when not occupied) | Not known |

Time to evacuate (from records or estimated)

| | |
|--|--|
| Normal working hours | To safe fire zone less than 3 minutes. |
| Out of hours (e.g. overtime, meetings etc) | To safe fire zone in less than 3 minutes |

Time when fire fighting will commence

| | |
|---------------------------|------------------------------|
| Fixed installation (Type) | N |
| Portable appliances | Immediate. |
| In-house fire team | NA |
| Fire Brigade | Not known. Estimate 8- mins. |

Background Information

Emergency Lights on stairwell upper floor science block. Significant height to replace bulb.



Artworks on window ledges and walls of fire escape route



Fire Zone Map and Fire Panel

Background Information

Background Information

Fire Risk Assessment Process

This fire risk assessment was based on the process outlined in **Figure 1** which follows Government Guidance on Fire Risk Assessment.

Fire Safety Training and Information

A comprehensive programme for the provision of fire safety training and information must be in place for all employees and any other relevant persons. The frequency of the training will be determined by the level of hazard and risk in relation to the number of occupants, location, layout and size of the premises and type of business operations. However, fire safety training and information should be provided for all employees on the day of induction. A documented record of all training must be made. The records must be held on site for audit or inspection purposes.

An annual programme of fire evacuation exercises drill should be carried out. The frequency of the exercises with the 12-month period may be determined by the level of hazard and risk in relation to the number of occupants, location, layout and size of the premises and type of business operations. Good practice is to hold a drill every 6-months. A documented record of all evacuation exercises (including false alarm evacuations) must be made. The records must be held on site for audit or inspection purposes.

Fire Alarm System (Bells, Sounders, Strobes)

The fire alarm system should be test-sounded weekly, during working hours, and considering any shift working. The fire alarm system should be activated from a different alarm point each time in rotation. The alarm tests should be recorded with the records held on site for audit or inspection purposes.

Emergency Lighting

The test and inspection programme should be conducted by a competent person in accordance with BS 5266 Parts 1 and 8 together with manufacturers guidance. Tests and inspections should be recorded and certificated. These records should be held on site and made available to view for audit or inspection purposes.

Weekly inspection. The emergency lighting must be inspected regularly (daily/weekly) to ensure all indicator lights, where applicable, are operating.

Monthly test. The emergency lighting must be tested monthly (to include any auto-start generator if applicable) by simulating a mains failure, with each luminaire to be powered down long enough to ensure operation. The tests should be recorded with the records held on site for audit or inspection purposes.

Fire Alarm and Detection Systems

The system must be tested and inspected as part of a Planned Preventive Maintenance programme. The frequency of the test/inspection within the 12-month period will be determined by the number of detectors, layout and size of the premises and type of business operations. The test and inspection

Background Information

programme should be conducted by a competent engineer in accordance with BS5389 Part 1 and manufacturer's guidance. Tests and inspections should be recorded and certificated. These records should be held on site and made available to view for audit or inspection purposes.

Fixed Fire Fighting Equipment

Fire fighting equipment, such as sprinkler, misting or inert gas drenching systems, must be inspected and serviced annually by a competent engineer in accordance with BS EN 12845:2004 and 2009 Fixed Firefighting Systems. Automatic Sprinkler Systems. Design, Installation and Maintenance and BS 9251: 2005 – Sprinkler Systems for Residential and Domestic Occupancies. A certificate of inspection or engineer's worksheet should be issued for each inspection. These records should be held on site and made available to view for audit or inspection purposes.

Electrical System

The fixed electrical systems should be visually inspected annually by a competent engineer in accordance with the BS 7671: Requirements for electrical installations. IET Wiring Regulations (Seventeenth edition). A full certified test and inspection should be carried out at least every five years. A certificate of inspection or engineer's worksheet should be issued for each inspection. These records should be held on site and made available to view for audit or inspection purposes.

Portable Electrical Appliances

These must be tested and inspected regularly as part of a Planned Preventive Maintenance programme. The frequency of the test/inspection will be determined by the type, use, and location of the appliances. The test and inspection programme should be conducted by a competent engineer in accordance with the Electricity at Work Regulations and HSE guidance INDG 236. Tests and inspections should be recorded and certificated. These records should be held on site and made available to view for audit or inspection purposes.

Lightning Conductor System (if installed)

The lightning conductor system should be inspected and tested annually by a competent engineer in accordance with BS EN 62305. Tests and inspections should be recorded and certificated. These records should be held on site and made available to view for audit or inspection purposes.

Fire Doors, Escape Routes and Final Exit Doors

Fire doors should be kept closed at times and should never be wedged open. Fire doors may be secured in the open position by means of a suitable fire alarm linked door keep system. Regular checks should be made on all fire doors in accordance with industry guidance such as the Code of Practice for Fire Doors 2009 by the Door and Hardware Federation. Escape routes should be designed and used in accordance with BS 9999:2008 and Approved Document B of the Building Regulations.

Fire Risk Assessment Process

[Based on the HM Government approach to fire risk assessment]

Fire Risk Assessment Process

[Based on the HM Government approach to fire risk assessment]

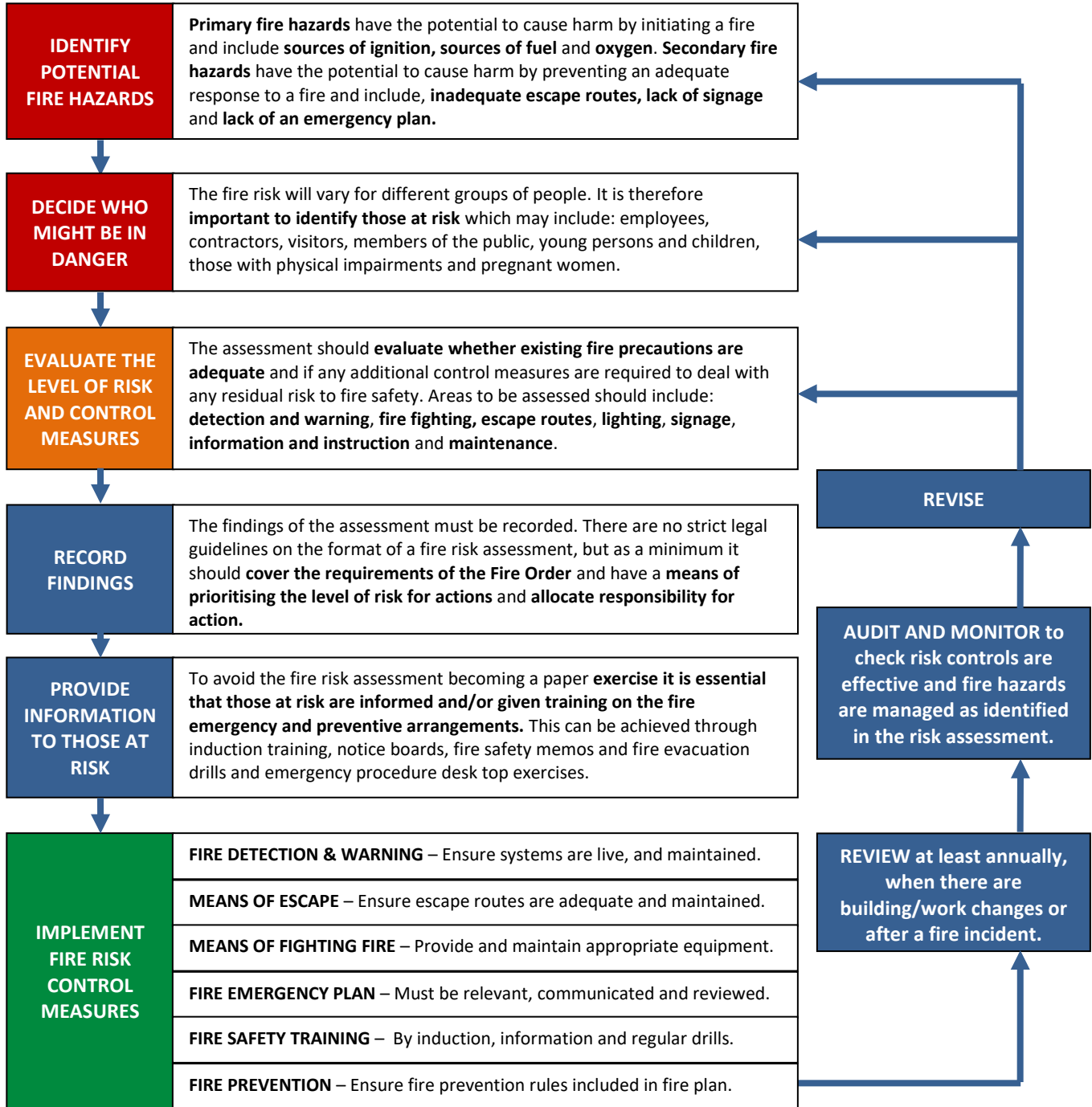


Figure 1

References

Government Guidance

HM Government guides on Fire Safety Risk Assessment. The government has produced several guides on fire risk assessment, including the following:

- Animal Premises and Stables
- Educational Premises**
- Factories and Warehouses
- Healthcare Premises
- Hospitality Industry
- Large Places of Assembly
- Means of Escape for Disabled People
- Offices and Shops**
- Open Air Events and Venues
- Sleeping Accommodation
- Small and Medium Places of Assembly
- Residential Care Premises plus supplementary Guidance of January 2011.
- Theatres, Cinemas and Similar Places
- Transport Premises and Facilities

The relevant guides were used for the purposes of this fire risk assessment.

British Standards, including:

BS 5266: Emergency lighting

Part 1: Code of practice for the emergency lighting of premises other than cinemas and certain other specified premises used for entertainment

Part 8: Emergency escape lighting

BS 5306: Fire Extinguishing Installations and Equipment on Premises

Part 3: Maintenance of portable fire extinguishers – Code of practice.

Part 8: Selection and installation of portable fire extinguishers – Code of practice.

BS 5839: Fire Detection and Alarm Systems for Buildings

Part 1: Code of practice for system design, installation, commissioning and maintenance.

BS 7671: Requirements for electrical installations. IET Wiring Regulations. Seventeenth edition.

BS 8214: Code of practice for fire door assemblies with non-metallic leaves

BS EN 1125: Building Hardware, Panic Exit Devices Operated by a Horizontal Bar

Requirements and test Methods.

British Standard - BS EN 12845:2004 and 2009 Fixed Firefighting Systems. Automatic Sprinkler Systems. Design, Installation and Maintenance.

References

BS 9251: 2005 – Sprinkler Systems for Residential and Domestic Occupancies.

Building Regulations, Approved Document B – as appropriate and particularly for new buildings.

Industry Best Practice - as recognised.

Recommended Escape Route Travel Distances

| Suggested travel distances – Offices and Shops | |
|--|---|
| Escape routes | Suggested of travel distance |
| When more than one escape route is provided | 25m in higher fire-risk area ¹ 45m in normal fire-risk area 60m in lower fire-risk area ² |
| Where only a single escape route is provided | 12m in higher fire-risk area ¹ 18m in normal fire-risk area 25m in a lower fire-risk area ² |

1. Where there are small higher-risk areas this travel, distance should apply. Where the risk assessment indicates that the whole building is high risk, seek advice from a competent person.
2. The travel distance for lower risk premises should only be applied in exceptional cases in the very lowest risk premises where densities are low, occupants are familiar with the premises, excellent visual awareness, and very limited combustibles.