

# Fire Risk Assessment

## Broadhurst School

(March 2021)





*Ace Fire*  
14 Concorde Road  
Norwich  
NR6 6BW



## Report Index

Property Information	Page 3
Statement of the Fire Risk Assessment	Page 4
Scope of the Fire Risk Assessment	Page 5
General Information	Page 6
Fire Hazards and Their Elimination or Control	Page 7
Fire Protection Measures	Page 9
Management of Fire Safety	Page 11
Level of Fire Risk	Page 13
Action Plan Colour Coding Reference	Page 14
Action Plan	Page 15
Example of a Fire Safety Maintenance Check List	Page 16
Emergency Plan Bullet Points	Page 17
Fire Hazards, Elimination or Control Measures and Relevant Codes of Practice	Page 18
Notes	Page 21

<b>Property Information</b>	
<b>Property Address</b>	Broadhurst School, 19 Greencroft Gardens, London, NW6 3LP.
<b>Name of responsible person/persons</b>	Mr B Berkery.
<b>Site Manager</b>	Mr B Berkery & Mrs Sylvester.
<b>Areas of assessment</b>	All areas & rooms within the school and including the basement and first floor Office of no.21 Greencroft Gardens.
<b>Building type &amp; construction</b>	Single occupancy (main school) semi-detached building dating back to the 1890's with various conversions since. Constructed from traditional and modern materials.
<b>Number of floors</b>	5.
<b>People at risk</b>	Staff, pupils, visitors and contractors.
<b>Risk of ignition</b>	Faulty electrical installations/appliances, deliberate fire setting (arson).
<b>Sources of fuel</b>	Class A – combustible solids. Fires involving electrical appliances & installations.
<b>Date of previous risk assessment</b>	March 2018.
<b>Significant changes since last fire risk assessment.</b>	The school have now taken over the ground floor flat of No.21 and refurbished it into a new administration area with an internal stairway down to the basement area. Due to these changes the emergency evacuation plans have been reviewed and rewritten.
<b>Assessment carried out &amp; prepared by:</b> Tim Redman of Ace Fire. 13/03/2021.	
	
<b>Peer Reviewed by:</b> John Sadler of Ace Fire. 15/03/2021.	
	
<b>Recommended date for review</b>	<b>March 2022.</b>

## Statement of the Fire Risk Assessment

This risk assessment is made under the requirements of the Regulatory Reform (Fire Safety) Order 2005 and where necessary guidance, recommendations and instruction has been taken, and quoted, from; The British Standards, The Buildings Regulations Part B 2010, Health & Safety at Work Act 1974, Management of Health & Safety at Work Regulations 1999, Electricity at Work Regulations 1989, Provisions and Use of Work Equipment Regulations 1998, The Housing Act 2004 and from a series of publications issued by Department for Communities and Local Government (DCLG) Fire Safety Risk Assessment guides and industry recognised guides such as Local Authorities Coordinators of Regulatory Services (LACoRS) "Housing – Fire safety" and the Local Government Group "Fire safety in purpose-built blocks of flats".

The potential hazards and/or risks identified (if any) in each section of this document increase the risk to life and/or property safety in and around the areas assessed.

The additional controls, recommendations and actions given for each section of the action plan/summary section of the document should be dealt with accordingly in order to bring the assessed areas up to the required standard and to reduce the risk to a level which is acceptable in the circumstances.

Additionally, in accordance with The Regulatory Reform (Fire Safety) Order 2005, the responsible person/persons must, among other things 'provide his employees with comprehensive and relevant information on the risks to them identified by the risk assessment, the preventative and protective measures to take and the procedures and measures which are in place for serious and imminent danger.

Before employing a child, the responsible person/persons must provide the parents of the child, among other things, with comprehensive and relevant information on the risks to that child identified by the risk assessment, the preventative and protected measures taken and the procedures and measures which are in place for serious and imminent danger.

The responsible person/persons must also co-operate with other relevant responsible persons (sharing the same occupancy) and inform them of relevant risks in his undertaking.

Where appropriate and necessary the assessment has included the consideration of sections 1-6, 8, 9 and 11 of the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) and other legislation relevant to the premises.

The risk assessment should be available for inspection or validation by any authorized person and should be reviewed:

Following a change of work practice,

Following a significant change of staffing level,

Following any structural or material change to the premises or processes conducted,

Following any change in the fire precautions in the premises,

Following any near miss or fire incidents,

At recommended intervals of no more than 12 months,

The purpose of this report is to provide an assessment of the risk to life in these premises, and, where appropriate to make recommendations to ensure compliance with fire safety legislation. The report does not address the risk to property or business continuity from fire.

## Scope of the Fire Risk Assessment

In relation to the prevention and management of fire within these premises the following subjects are examined in this report:

- Means of escape from the premises.
- Fire exit & other fire safety signage.
- Means of raising the alarm.
- Emergency Lighting.
- Emergency Plans.
- Firefighting Equipment.
- Risk of Arson.
- Electrical appliance safety.
- Staff training.
- Compartmentation.
- Fire safety management.
- Fire detection & warning.

Note:

Whilst carrying out this fire risk assessment we will highlight any matters for concern that is discovered during the course of the assessment. It must be born in mind however that we can only report on what is found at the time of carrying out the assessment. Potential fire risks may well be different now than at the time of the risk assessors first visit audit and preparation of the report.

The fire risk assessment has been carried out as Type-1 Non-Destructive and cannot/should not be used as the building's structural inspection report or survey, if required such arrangements should be carried out by a competent person, namely a qualified building inspector.

A Type 1 fire risk assessment is the basic fire risk assessment required for the purpose of satisfying the Fire Safety Order (FSO). The inspection of the building is non-destructive. Where there are demountable false ceilings it may be appropriate to lift a sample of readily accessible false ceiling tiles. In addition, it will normally be appropriate to open a sample of service risers, provided access is practicable at the time of inspection. Unless there is reason to expect serious deficiencies in structural fire protection – such as inadequate compartmentation, or poor fire stopping – a Type 1 inspection will normally be sufficient for most premises. Where doubt exists in relation to these matters, the action plan of a Type 1 fire risk assessment may recommend that one of the other types of fire risk assessment be carried out or that further investigation be carried out by specialists. (However, this should not be a generic recommendation of all Type 1 fire risk assessments; the recommendation should be based on identification of issues that justify reason for doubt.)

The aim of this document is to assess fire risks within the building in order to protect persons working, residing and visiting the property including any contractor carrying out work at the building.

It is the duty of the person/persons deemed responsible for the property to ensure that the necessary requirements are met.

## General Information

<b>1</b>	<b>The Premises</b>	
1.1	Number of floors	5.
1.2	Approximate floor area (m2)	Not measured.
1.3	Brief details of construction	Built in the 1890's and developed over recent years, constructed from brick, concrete, plasterboard timber.
1.4	Use of premises	Education premises for children from the ages 2 ½ - 4 ½ years.
<b>2</b>	<b>The Occupants</b>	
2.1	Approximate maximum number	126. 103 children + 23 staff.
2.2	Approximate number at any one time	75.
2.3	Maximum number of members of public	None usually, except parents dropping and picking up their children.
2.4	Associated times of occupation.	Mon-Fri 08.00 – 20.00 (the caretaker is the only occupant within the school until 8pm)
<b>3</b>	<b>Occupants at risk from fire</b>	
3.1	Sleeping occupants	None.
3.2	Disabled occupants	There are no disabled members of staff or pupils.
3.3	Occupants in isolation	No.
3.4	Young persons	The school accommodates for children between the ages of 2 ½ - 4 ½ years.
3.5	Others	Contractors and visitors by appointment only.
<b>4</b>	<b>Fire loss experience</b>	None.
<b>5</b>	<b>Other relevant information.</b>	None.
<b>6</b>	<b>Relevant fire safety legislation</b>	
	The following fire safety legislation applies to these premises.	Regulatory Reform (Fire Safety) Order 2005.
	The above legislation is enforced by.	London Fire And Rescue Services.
	Other legislation that makes significant requirements for fire precautions in these premises (other than the building regulations 2010).	Health & Safety at Work Act 1974. Management of Health & Safety at Work Regulations 1999. The Office for Standards in Education, Children's Services and Skills (OFSTED). Electricity at Work Regulations 1989. Provisions and Use of Work Equipment Regulations 1998.

## Fire Hazards and Their Elimination or Control

Fire Hazards and Their Elimination or Control			
<b>7.</b>	<b>Electrical sources of ignition</b>	<b>Yes</b>	<b>No</b>
7.1	Reasonable, measures taken to prevent fires of electrical origin?	✓	
7.2	More specifically:		
	Fixed installations periodically tested?	✓	
	Portable appliance testing up to date?	✓	
	Suitable policy regarding the use of portable electrical appliances?	✓	
	Suitable use of trailing leads and sockets/adapters?	✓	
<b>Comments and potential hazards:</b>			
The fixed electrical installations appear to be in a good working order, the last safety inspection/test, in accordance with the IEE Wiring Regulations (BS7671), has recently been carried out in 2021. Portable electrical appliance testing (P.A.T) was last undertaken in October 2020 by Cambs-Pat (uk) Ltd. Trailing and extension leads, where appropriate, are used in good order.			
<b>8.</b>	<b>Smoking</b>	<b>Yes</b>	<b>No</b>
8.1	Are measures taken to prevent fires as a result of smoking?	✓	
8.2	More specifically:		
	Smoking prohibited on these premises?	✓	
	Smoking prohibited in appropriate areas?	✓	
	Suitable arrangements for those who smoke?	✓	
	Were these arrangements observed at the time of the assessment?		✓
<b>Comments and potential hazards:</b>			
"No Smoking" signs are displayed. It is regarded and widely known that smoking is prohibited within public places and workplaces.			
<b>9.</b>	<b>Arson</b>	<b>Yes</b>	<b>No</b>
9.1	Does the security against arson appear satisfactory?	✓	
9.2	Are the boundaries and exterior of the premises free from unnecessary combustibles?	✓	
<b>Comments and potential hazards:</b>			
The security of the premises is satisfactory and there has been no recent history of arson or vandalism in the surrounding area.			
<b>10.</b>	<b>Heating installations including portable heaters</b>	<b>Yes</b>	<b>No</b>
10.1	Are portable heaters in use?		✓
10.2	If portable heaters are used:	<b>NA</b>	<b>NA</b>
	Are hazardous types used (e.g. LPG or radiant bar heaters)?	<b>NA</b>	<b>NA</b>
	Are measures taken to reduce the risk of ignition of combustible materials?	✓	
10.3	Is the maintenance of the fixed heating installations up to date?	✓	
<b>Comments and potential hazards:</b>			
The building is heated by way of gas central heating radiators and an electrical airflow system. The Gas Safety inspection and test was carried out in June 2020 by a registered contractor. The boiler which is sited on the new stairway of the admin area must have a Carbon Monoxide located close by, this can be mains powered or battery. There was no issue with a confluence of heat source and combustibles materials.			
<b>11.</b>	<b>Cooking</b>	<b>Yes</b>	<b>No</b>
11.1	Are safe cooking practices adhered to?	✓	
11.2	More specifically:		
	Are filters changed and ductwork cleaned regularly?	<b>NA</b>	<b>NA</b>
	Are appropriate extinguishers available?	✓	
<b>Comments and potential hazards:</b>			
Basic kitchen appliances in use: oven, microwave, kettle all of which are in good condition. The kitchen is located in the basement area of no.21 Greencroft Gardens. Firefighting equipment is located in the entrance lobby and a fire blanket sited in the kitchen.			

## Fire Hazards and Their Elimination or Control (continued)

12.	<b>Housekeeping</b>	Yes	No
12.1	Is the standard housekeeping adequate?	✓	
12.2	More specifically:		
	Are combustible materials kept away from ignition sources?	✓	
	Is there a buildup of combustible or waste material?		✓
	Are hazardous materials/substances stored correctly?	✓	
	In general is the storage of combustibles satisfactory?	✓	
<p><b>Comments and potential hazards:</b>                      It is typical of this type of premises that there will always be a certain level of Class A combustibles (paper, cardboard, textiles etc.).                      Upon inspection it was noted that care is taken not to store combustible materials close to sources of heat.                      The overall standard of housekeeping and storage continues to be of a high standard.</p>			
13.	<b>Outside contractors and building works</b>	Yes	No
13.1	Are fire safety policies imposed on outside contractors?	✓	
13.2	Is there adequate control in reference to work carried out by outside contractors which may include hot works?	✓	
13.3	If there are in-house maintenance personnel, are preventive measures taken during any hot works?	✓	
<p><b>Comments and potential hazards:</b>                      Where applicable, if contractors working on site are required to use tools and/or equipment that generate heat i.e. heat guns, gas burners/torches then a "Hot Works Permit" is issued by the responsible person</p>			
14.	<b>Dangerous substances</b>	Yes	No
14.1	Are there adequate fire precautions in place which are associated with dangerous substances within the premises?	NA	NA
14.2	If "Yes" to 14.1 has a suitable risk assessment been carried out, in accordance with the Dangerous Substances and Explosive Atmospheres Regulations 2002?	NA	NA
<p><b>Comments and potential hazards:</b>                      Not applicable.</p>			
15.	<b>Other significant fire hazards</b>	Yes	No
15.1	Hazards:		
<p><b>Comments and potential hazards:</b>                      Not applicable.</p>			



## Fire Protection Measures

16.	Means of escape from fire	Yes	No
16.1	It is considered that the premises are provided with reasonable means of escape from fire.	✓	
16.2	More specifically:		
	Adequate design of escape routes?	✓	
	Adequate provision of exits?	✓	
	Exits easily and immediately operable where necessary?	✓	
	Fire exits open in the direction of escape where needed?	✓	
	Avoidance of sliding or revolving doors as fire exits where appropriate?	✓	
	Satisfactory means for securing exits?	✓	
	Reasonable distances of travel:	✓	
	• Where there is a single direction of travel?	✓	
	• Where there are alternate means of escape?	✓	
	Suitable protection for escape routes?	✓	
	Suitable fire precautions for all inner rooms?		✓
	Escape routes unobstructed?	✓	
16.3	It is considered that the premises are provided with reasonable arrangements for means of escape for disabled persons?	✓	

### Comments and potential hazards:

Improvements have been made as a result of the last risk assessment; the exterior gate is now kept unlocked during the working day but is still secure from the inside (sliding bolt) additionally the fire escape door on the upper most floor has been repaired so that it now opens fully.

There are two possible escape routes from each floor, including the new administration area.

The new offices (of No.21) have no automatic fire detection. As these areas have people working, sometimes as lone workers, it is essential that automatic fire detection and warning is installed, see section 20.

All classrooms are provided with information regarding their designated exit routes to follow.

Any pupil or staff member whom may require assistance will be appointed a "buddy" in the event of an evacuation, this would have been pre-determined in a Personal Emergency Evacuation Plan (PEEP), currently there are no pupils or staff that would require a PEEP.

At the time of the risk assessment there were no hazards or obstructions found on the escape routes.

17.	Measures to limit fire spread	Yes	No
17.1	It is considered that there is:		
	• Compartmentation of a reasonable standard.	✓	
	• Reasonable limitations of linings that may promote fire spread.	✓	
	• Fire doors are in a satisfactory condition.		✓
	• Evidence of failings with the compartmentation?	✓	
17.2	Upon inspection it appears that fire dampers are provided to protect the means of escape against the spread of fire, smoke and combustion materials in the early stages of fire.	NA	NA

### Comments and potential hazards:

There is no compartmentation from floor to floor (except ceiling and floors), the main circulation areas and stairways are open plan with no separation.

Doors to rooms that lead onto the escape route are of traditional solid pine design with paneled insets.

Vision panels have been fitted into the classroom doors; these doors will provide some protection in the event of a fire but do not comply with the current fire door standards (BS476). Although the best recommendation has always been to upgrade the door sets to FD30 (30-minute fire doors) it is still my opinion that with the existing fire precautions, staff training, emergency evacuation plans in place and availability of escape routes (internal & external) the existing doors are acceptable, if the number of pupils significantly increases or the overall risk heightens then the provision of fire doors would be strongly recommended.

The newly acquired and refurbished area of No.21 requires some improvements to the main access door and the door at the top of the basement stairs. As the main access door leads onto the common area of a block of flats it must meet the requirements of a 30-minute fire door. Upon inspection there are no markings to indicate the fire resistance of the door. The internal separation door at the top of the basement stairs has

## Fire Protection Measures (continued)

no intumescent seals and fails to close freely. If this door is generally held open it should not be wedged. In order to meet the requirements, the following is recommended; replace the main access door to the office (flat) with an industry approved 30-minute fire door set; fit intumescent smoke seals and an automatic release door retainer to the office door at the top of the basement stairs.			
<b>18.</b>	<b>Emergency escape lighting</b>	<b>Yes</b>	<b>No</b>
18.1	Reasonable standard of emergency lighting within the premises?	✓	
<b>Comments and potential deficiencies:</b> The building benefits from the installation of emergency backup lighting covering the escape routes, stairs and final exits. There is a good source of natural and borrowed lighting throughout.			
<b>19.</b>	<b>Fire safety signage</b>	<b>Yes</b>	<b>No</b>
19.1	Reasonable standard of fire safety signs and notices?	✓	
<b>Comments and potential deficiencies:</b> Fire action notices are displayed on each floor and within the classrooms. Fire exit directional signs are displayed along the escape routes all the way to the final exit. Additional exit signs have been introduced as a result of the previous fire risk assessment.			
<b>20</b>	<b>Means of giving warning in case of fire</b>	<b>Yes</b>	<b>No</b>
20.1	Reasonable manually operated fire alarm system provided?	✓	
20.2	Automatic fire protection provided?	✓	
20.3	Is the automatic fire detection appropriate for this type of premises and fire risk?		✓
20.4	Are the associated devices in good condition and free from obstruction?	✓	
20.5	Remote transmission of alarm signal?		✓
<b>Comments and potential deficiencies:</b> There is Automatic Fire Detection (AFD) within the building consistent of that to a Grade L4. Smoke detectors are located along the escape routes with a heat sensor in the kitchen, manual call points (Break Glass Box) are provided on each floor and within the classrooms which have access to the external stairway. Fire bells are present on all floors with the control panel on the ground floor entrance lobby. Now the school has taken over the ground floor flat of No.21 it is proposed that the AFD is extended to cover the top of the stairs and internal offices. Additionally, a sounder should be installed within the main office as it was reported that occupants can not hear the fire bells when they are working within the front offices. The			
<b>21</b>	<b>First Aid Firefighting equipment.</b>	<b>Yes</b>	<b>No</b>
21.1	Reasonable provision of portable fire extinguishers?	✓	
21.2	Are hose reels provided?		✓
21.3	Are fire extinguishers easily accessible?	✓	
21.4	Are firefighting appliances appropriately signed?	✓	
<b>Comments and potential deficiencies:</b> Fire extinguishers are provided on all floors to tackle small fires involving Class A combustibles and fires of electrical origins. The extinguishers are wall mounted and accompanied with an identification sign. All of the fire extinguishers within the main school area are sited lower than usual, this has been done to protect the children from possible injury from a falling extinguisher.			
<b>22</b>	<b>Relevant automatic fire extinguishing systems and other fixed equipment</b>	<b>Yes</b>	<b>No</b>
22.1	Type of system:	NA	NA
<b>Comments:</b> Not applicable.			
<b>23</b>	<b>Fire-fighters Switch</b>	<b>Yes</b>	<b>No</b>
23.1	Suitable provision of fire-fighting switch for high voltage luminous tube signs, etc.	NA	NA
<b>Comments:</b>			

## Management of fire safety

24	Fire safety procedures	Yes	No
24.1	Fire safety is managed by: Mr Berkery & Mrs Sylvester.		
24.2	Competent persons appointed in undertaking general fire precautions are Mr Berkery & Mrs Sylvester.		
24.3	Are fire safety arrangements recorded?	✓	
24.4	Appropriate fire procedures (emergency plans) in place?	✓	
	More specifically:		
	Are these procedures appropriate for the building type and use?	✓	
	Are procedures in the event of a fire documented?	✓	
	Are there adequate arrangements for contacting the fire and rescue service?	✓	
	Are there adequate arrangements in place to meet the fire and rescue service upon arrival and provide information that may include hazards to fire fighters?	✓	
	Are there arrangements in place to ensure that the premises have been evacuated?	✓	
	Are there suitable fire assembly points?	✓	
	Are there provisions in place to aid disabled people in an evacuation?	✓	
24.5	Persons trained in the use of fire extinguishers. All staff have received fire extinguisher training.	✓	
24.6	Persons nominated and trained to assist with evacuation. All teaching staff will assist their own class and Mr Berkery and Mrs Sylvester along with the administrator will assist others.		
24.7	Routine in house inspections of fire safety precautions.	✓	

**Comments:**

The school has a comprehensive emergency evacuation plan in place. Copies of the plans are displayed in each classroom along with details of the relevant escape routes to take.

Each class has an assigned fire marshal who will be sweep the immediate areas of their floor prior to continuing with the evacuation.

The evacuations plans were last reviewed in 2020.

All staff have received fire extinguisher training.

All teaching staff will assist their own class and Mr Berkery and Mrs Sylvester along with the administrator will assist others.

Matters relating to fire safety are overseen by the responsible persons.

25	Training and fire drills.	Yes	No
25.1	Are all staff given fire safety instruction and training on induction?	✓	
25.2	Is all fire safety training given at suitable intervals?	✓	
25.3	Does all fire training provide information, instruction or training on the following:		
	Fire risks in the premises?	✓	
	The fire safety measures in the premises?	✓	
	What to do in the event of a fire?	✓	
	What to do on hearing the fire alarm?	✓	
	How to raise the alarm?	✓	
	Correct use of fire extinguishers?	✓	
	Means for calling the fire rescue services?	✓	
	Identity of nominated fire wardens?	✓	
	Identity of persons nominated to use firefighting equipment?	✓	
25.4	Are fire wardens given additional training in accordance with their role?	✓	
25.5	Are fire drills carried out at sufficient intervals?	✓	
25.6	When the employee of another employer carries out work in the premises:		
	Is there employer given appropriate information regarding to fire risks and general fire safety?	✓	
	Are these employee's provided with sufficient instruction and information relating to the fire risks and fire safety?	✓	

**Comments:**

All training is up to date and is applicable to the school's fire strategy and evacuation procedures.

## Management of fire safety (continued)

Fire Warden training is carried out every two years. New starters are provided with information and training on the fire policy and general fire awareness.

Fire safety continues to be discussed at staff meetings each term.

The most recent fire drill was carried out in December 2020. All drills are recorded, any resulting issue is also documented and actioned taken where possible-practical.

As far as it is appropriate, any employee from an outside source that will be working within the building for a period of time shall be provided with details of the buildings fire safety arrangements.

This is not the case for contractors carrying out small repairs or maintenance, the responsible person/persons would be responsible for their wellbeing and safety.

26.	Testing and maintenance	Yes	No
26.1	Adequate maintenance of premises?	✓	
26.2	Weekly testing and periodic servicing of the fire alarm system?	✓	
26.3	Monthly and annual testing of emergency escape lighting?	✓	
26.4	Annual maintenance fire extinguishers?	✓	
26.5	Periodic inspection of external escape stairs and gangways?	✓	
26.6	Six monthly inspection and annual testing of any rising mains?	NA	NA
26.7	Weekly and monthly testing, six monthly inspection and annual testing of any firefighting lifts?	NA	NA
26.8	Weekly testing and periodic inspection of sprinkler installations?	NA	NA
26.9	Routine checks of final exit doors and/or security fastenings?	✓	
26.10	Are systems in place for reporting and subsequent restoration of safety measures that have fallen below standard?	✓	

**Comments:**

The building is of reasonable appearance and in a satisfactory condition for its age.

Weekly activation tests on the fire alarm system are carried out and documented by the caretaker and the annual maintenance is provided by Chubb Fire (Bi-annual testing – BS5839).

Firefighting appliances are inspected monthly and documented by the caretaker and maintained annually by Chubb Fire in accordance with BS5306.

All staff are encouraged to check the escape routes as they go about their daily duties.

Regular inspections are carried out by the caretaker to ensure that there are no hazards or obstructions preventing a safe passage out of the building.

The responsible persons, senior staff and the caretaker hold regular meetings to discuss any downfalls in the fire safety strategies and standards.

27	Records	Yes	No
27.1	Appropriate records of:		
	Fire drills.	✓	
	Fire training.	✓	
	Fire alarm maintenance.	✓	
	Emergency lighting maintenance.	✓	
	Firefighting appliance maintenance.	✓	
	Maintenance and testing of other fire protection systems.	NA	NA

**Comments:**

The fire log book has been inspected and all entries are up to date.

A very thorough and well-maintained log book.

28	Review
----	--------

**Comments:**

A review of this risk assessment should be carried out periodically, the recommended time line is generally every 12 months.

## Level of Fire Risk

Taking into account the fire protection measures observed at the time of this risk assessment, it is considered that the hazard from fire (likelihood of fire) at these premises is:

Low		Medium	✓	High	
-----	--	--------	---	------	--

In this context, a definition of the above terms is as follows:

**Low:** Unusually low likelihood of a fire as a result of negligible potential sources of ignition.

**Medium:** Normal fire hazards (e.g. potential ignition sources) for this type of occupancy. With fire hazards generally subject to appropriate controls (other than minor short comings).

**High:** Lack of adequate controls applied to one or more significant fire hazards, such as to result in significant increase in the likelihood of fire.

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

Slight Harm		Moderate Harm	✓	Extreme Harm	
-------------	--	---------------	---	--------------	--

In this context, a definition of the above terms is as follows:

**Slight Harm:** Outbreak of fire unlikely to result in serious injury or death of any occupants (other than an occupant sleeping in a room in which a fire occurs).

**Moderate Harm:** Outbreak of a fire could foresee ably result in injury (including serious injury) of one or more occupants, but it is unlikely to include multiple fatalities.

**Extreme Harm:** Significant potential for serious injury or death of one or more occupants.

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

Trivial		Tolerable	✓	Moderate		Substantial		Intolerable	
---------	--	-----------	---	----------	--	-------------	--	-------------	--

**Trivial:** No action is required and no detailed records need be kept.

**Tolerable:** No major additional fire precautions required. However, there might be a need for reasonably practicable improvements that involve minor or limited cost.

**Moderate:** It is essential that efforts are made to reduce the risk. Risk reduction measures which should take cost into account, should be implemented within a defined time period.

Where moderate risk is associated with consequences that constitute extreme harm, further assessment might be required to establish more precisely the likelihood of harm as a basis for determining the priority for improving control measures.

**Substantial:** Considerable resources might have to be allocated to reduce the risk. If the premises are unoccupied it should not be occupied until the risk has been reduced. If the premises are occupied, urgent action should be taken.

**Intolerable:** Premises (or relevant area) should not be occupied until the risk is reduced.

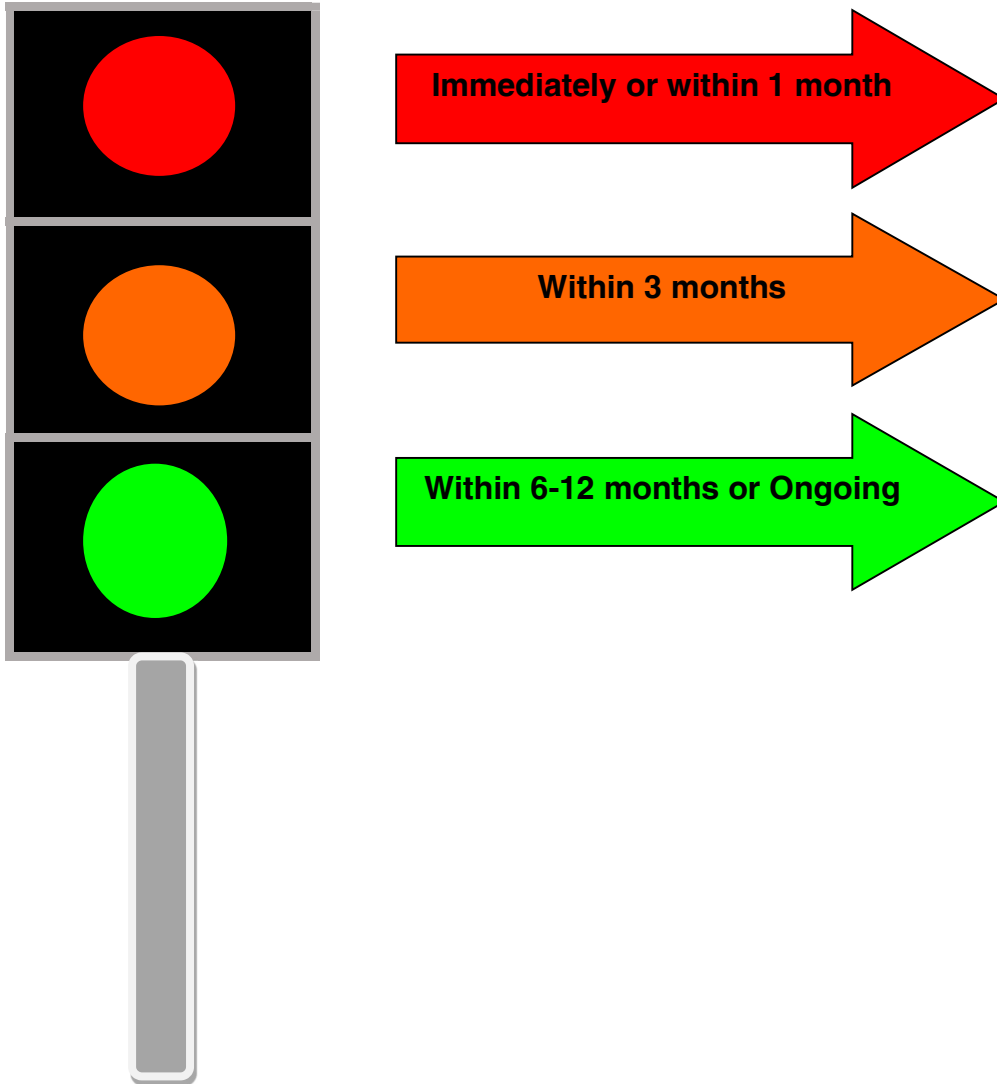
**(Note that, although the purpose of this section is to place the fire risk in context, the above approach to the fire risk assessment is subjective and for guidance only. All hazards and deficiencies identified in this report should be addressed by implementing all the recommendations contained in the following action plan. The fire risk assessment should be reviewed regularly)**

## Action Plan Colour Coding Reference

The time frame for each suggested action is based on its urgency, importance and ease to carry out. This is commonly known as the Traffic Light system.

All hazards and deficiencies identified in this report should be addressed in order to:

- Reduce the risk of fire breaking out.
- Reduce the effects caused by a fire within the premises.
- Improve the effectiveness of the fire safety equipment, management and strategies.



## Action Plan

Section	Action	Date Completed & By Whom
10	Ensure that a carbon monoxide detector is provided and sited close to the boiler on the new stairway.	
17	Make provisions for the access door to the new administration area of No.21 to be replaced with an industry approved fire door. The door set must be; 30-minute fire resistant (minimum), fitted with three heat resistant hinges and a have a self-closing device.	
	Ensure that the internal separation door at the top of the basement stairs closes onto its frame freely and is fitted with intumescent heat-smoke seals. Fit an automatic release door retainer if it is the intention to generally keep the door open.	
20 (16)	Make arrangements for the fire alarm to be extended into the new administration area. This should include an additional sounder (fire bell) and smoke detectors. See notes page for suggested design of additional devices.	
<b>28</b>	Make arrangements for the fire risk assessment to be reviewed regularly.	

## Example of a Fire Safety Maintenance Check List:

### Daily checks

- Remove bolts, padlocks and security devices from fire exits, ensure that doors on escape routes swing freely and that fire doors close fully and check escape routes to ensure they are clear from obstructions and combustible materials.
- Check the fire alarm panel to ensure the system is active, fully operational and that no faults are showing.
- Where practicable, visually check that emergency lighting units are in good repair and working.
- Check that all safety signs and notices are legible.

### Weekly tests and checks

- Test fire-detection and warning systems and manually-operated warning devices weekly following the manufacturer's or installer's instructions.
- Check the batteries of safety torches and that fire extinguishers and hose reels are correctly located and in apparent working order. Fire pumps and standby diesel engines should be tested for 30 minutes each week.
- Inspect the fire log book, is it up to date.

### Monthly tests and checks

- Test all emergency lighting systems and safety torches to make sure they have enough charge and illumination according to the manufacturer's or supplier's instructions. This should be at an appropriate time when, following the test, they will not be immediately required.
- Check that fire doors are in good working order and closing correctly and that the frames and seals are intact.
- Ensure housekeeping standards are met.

### Six-monthly tests and checks

- A competent person should test and maintain the fire-detection and warning system.
- Carry out a full fire evacuation drill.
- Hold meetings with the responsible persons and site managers to discuss and review matters relating to fire safety.
- Make arrangements for the kitchen canopies, fans and filters to be cleaned professionally.
- Is the emergency plan still applicable to the building use?

### Annual tests and checks

- The emergency lighting and all firefighting equipment, fire alarms and other installed systems should be tested and maintained by a competent person.
- All structural fire protection and elements of fire compartmentation should be inspected and any remedial action carried out.
- Ensure that all staff receive fire safety and awareness training.

*# please note that some of the above may not be applicable to your building.*



## Emergency Plan Bullet Points

- What to do in the event of a fire
- Should residents adopt a stay put policy
- How to raise the fire alarm
- How to contact the fire brigade
- Who will take control in a fire situation
- Who is responsible for shutting down vital/dangerous equipment
- What dangerous equipment can be removed from site during an evacuation
- Where the fire exits are
- Who is responsible for checking the building
- How to check the building
- Who are the nominated fire wardens
- Contingency plans for any sleeping guests
- Who should liaise with the fire service
- Who is trained to use the firefighting equipment
- The location of the firefighting equipment
- A chart showing each fire zone of the building
- Important and useful phone numbers
- Individual staff roles

*# please note that some of the above may not be applicable to your building.*

## Fire Hazards, Elimination or Control Measures and Relevant Codes of Practice

### Fire Hazard Prompt List (Table 1)

This annex sets out a list of fire hazards that are normally considered in the fire risk assessment. Typical key measures for the elimination or control of each hazard are given, along with some relevant codes of practice or guidance documents. Government guidance documents in support of the relevant fire safety legislation also give guidance on those matters.

This prompt-list is not necessarily exhaustive, particularly in respect of measures for control and elimination of fire hazards, and there might be a need to consider further hazards and measures to prevent fire in the course of the fire risk assessment, particularly if work processes give rise to more specific fire hazards.

Similarly, the codes of practice and guidance documents referenced are intended only to comprise a representative sample of those available.

### Key factors to consider in assessment of means of escape (Table 2)

This table shows the key factors that should always be explicitly considered in assessment of means of escape. Most of the factors are quite broad and encompass a number of more specific issues. These key factors can be used as a form of prompt-list and should, therefore, normally be shown in the documented fire risk assessment

Guidance on means of escape is contained in Government guidance documents that support the relevant fire safety legislation.

## Table 1

Fire Hazard	Key measures for control or elimination of the fire	Relevant code of practice or guidance
Electrical faults	<p>Periodic inspection and testing of fixed electrical installations</p> <p>Portable appliance testing (PAT).</p> <p>Employees and visitors use of their own electrical equipment.</p> <p>Reduction in the quantity of extension/trailing leads and adaptors.</p>	<p>IEE Guidance note [22].</p> <p>IEE Guidance of practice for in-service inspection and testing of electrical equipment [23].</p> <p>HSE HSG 107 [24].</p> <p>Portable appliance testing: <a href="http://www.hse.gov.uk/myth/july.htm">www.hse.gov.uk/myth/july.htm</a></p>
Smoking	<p>Arrangements for those who wish to smoke.</p> <p>Prohibiting or limitation of smoking.</p>	
Arson	<p>Basic security measures to prevent malicious ignition by outsiders.</p> <p>Avoidance of unnecessary fire load in close proximity to the premises.</p>	The prevention and control of arson [25].
Improper use of portable heaters	<p>Avoidance of use of portable heating devices as far as being practical.</p> <p>If portable heaters are to be used, avoidance of the most dangerous type.</p> <p>Suitable measures to minimize the likelihood of ignition of combustible materials.</p>	
Faults in fixed heating installations	<p>Regular maintenance of heating installations.</p>	
Use of cooking appliances	<p>Suitable design of cooking areas.</p> <p>Suitability of fire extinguishers to tackle small fires.</p> <p>Regular removal &amp; replacement of filters and cleaning of extractors.</p>	<p>Cooking equipment [26].</p> <p>Fire risk assessment-catering extract ventilation.</p>
Lighting	<p>Provide lighting protection systems if likelihood of a lightning strike.</p>	BS EN 62305
Contractors' operations and hot-works by maintenance staff	<p>Suitable fire safety conditions in contracts with outside contractors.</p> <p>Suitable control over outside contractors while on the premises.</p> <p>Suitable control over hazardous activities by in-house maintenance personnel, such as hot-works involving cutting, welding or the use of blowlamps etc.</p>	<p>Standard fire precautions for contractors engaged on crown works [28].</p> <p>Fire prevention on construction sites [29].</p> <p>Fire safety on construction [30].</p>
Poor housekeeping and inadequate control over general fire hazards associated with work activities.	<p>Separation of combustible materials from ignition sources</p> <p>Avoidance of unnecessary &amp; inappropriate build up and storage of waste or combustible materials.</p> <p>Appropriate storage of hazardous materials.</p> <p>Correct maintenance in the work place.</p> <p>Routine safety inspections.</p>	

**Table 2**

<b>Key factor</b>	<b>Specific issues to consider</b>	<b>Notes</b>
Design of escape routes	<p>Do escape routes lead to a final exit?</p> <p>Do doors on the escape routes open in the direction of travel?</p> <p>Are doors on the escape routes fitted with appropriate panic bolts or latches?</p> <p>Will occupants of inner rooms be aware of a fire within the premises?</p> <p>Do any revolving or sliding doors have suitable by-pass doors where necessary?</p>	
Distances of travel	<p>Are travel distances reasonable?</p> <p>Are travel distances in dead ends suitably limited?</p>	
Protection of escape routes	<p>Are escape routes, such as staircases, dead end corridors, bedroom corridors etc., protected?</p> <p>Are all fire resisting doors properly self-closing, kept locked shut or only held open by suitable correctly functioning automatic door release mechanisms?</p>	
Adequate provision of exits and escape routes	<p>Is there is sufficient number of fire exits and escape routes?</p> <p>Are the number and widths of fire exits and escape routes sufficient for the number of occupants?</p>	
Exits easily and immediately operated (opened)	<p>Are fire exits easily opened without the use of a key?</p> <p>Is there only a single means of securing each fire exit?</p> <p>Where necessary do the means of securing fire exits comprise of panic bolts or latches?</p> <p>Where electronic locking devices are used, are their use acceptable and the communication between the secured door and fire alarm monitored and maintained?</p>	
Escape routes clear of obstructions and hazards	<p>Are escape routes kept clear and unobstructed?</p> <p>Are adequate widths of corridors and any other escape route maintained at all times?</p>	

## Notes

With reports that some office staff are unable to hear the fire alarm activations my proposal would be to add another sounder to the existing system.

As there is no fire detection within the new office areas occupants of the building (No.21) are vulnerable in the event of a fire starting and spreading from the office areas. It is proposed that mains interlinked smoke detectors are installed within each of the offices, they will not be required to be linked to any other part of the building, as No.21 & the School (No.19) are not structurally attached, as the intention here would be to raise the alarm in the event of a localized fire only. Alternatively, the existing fire alarm system within the school could be extended to provide the same levels of cover. There could be more work and costs involved with the latter but either way would be acceptable.

It should also be noted that the common areas of No.21, including the access door to the school office (ex flat), would fall under the requirements of their own fire risk assessment. This would generally include the installation of a heat sensor and bell, linked to the buildings fire alarm, sited within the entrance lobby.

**Ace Fire Ltd** – Your Complete Fire Protection Solution.  
Fire Extinguishers, Fire Alarms, Fire Risk Assessments, Fire Safety Training.  
Head Office. 14 Concorde Road, Norwich, NR6 6BW  
Tel. 01603 787333. Fax. 01603 787332.

[www.acefire.co.uk](http://www.acefire.co.uk)  
[info@acefire.co.uk](mailto:info@acefire.co.uk)