



# FIRE SAFETY TRAINING

FREE TRAINING GUIDE FOR THE WORKPLACE

Protecting People and Property Since 1985

# BS 9999:2017 Fire safety in the design, management and use of buildings – Code of practice

## Fire safety training

Training of staff and others for action in the event of a fire is an essential element of fire safety management.

Sufficient numbers of staff should be trained in fire prevention, fire protection and evacuation procedures, and be able to use the appropriate extinguishing equipment (and media), so as to provide full coverage of the building, with provision for contingencies, sickness or holiday absences.

### General

Fire safety training should form part of the planning, training and monitoring activity defined in the fire safety manual (see Clause 9 and Annex H).

All training should be given by a person who is competent both in the subject and in training. Fire safety training should be continuous, commencing with induction training on the first day of appointment of new staff and continuing in the form of regular refresher training.

Thereafter, staff should receive sufficient training at regular intervals (at least once a year) to make sure that they remain familiar with the fire precautions for the workplace and are reminded of the action to be taken in an emergency. Training should be more frequent where there is a high turnover of staff or where there is a high risk of fire.

In so far as the responsibilities are applicable to their role, all staff, including part-time staff, security staff, cleaning staff and contractors should be trained and instructed in:

- a) basic fire prevention;
- b) good housekeeping;
- c) risk awareness;
- d) smoking policy;
- e) the fire routine;
- f) the terms, conditions and restrictions of any licence;
- g) actions to be taken upon discovering a fire or upon hearing the fire alarm;
- h) knowledge of the escape routes, refuges and exits, especially those not in regular use;
- i) raising the alarm, including the location of alarm indicator panels;
- j) action to be taken upon hearing the fire alarm;
- k) arrangements for calling the fire and rescue service;
- l) special provisions for assisting disabled people;
- m) location of fire-fighting equipment;
- n) selection and use of fire-fighting equipment, including hand fire-fighting equipment (in larger premises it might be appropriate to train specific staff in this respect, rather than all staff);
- o) the importance of fire doors and the need to close all doors at the time of a fire and on hearing the fire alarm;
- p) process shut-down and shutting down non-essential equipment, stopping machines and processes and isolating power supplies, where appropriate;
- q) evacuation procedures (this includes reassuring any members of the public, escorting them to exits, and encouraging them to get well clear of the building);
- r) incident reporting procedures, including for "near miss" events and false alarm

Any members of staff who have particular responsibilities in respect of fire safety, including supervisory roles, should receive detailed instruction in their own duties and appropriate refresher training at least once, and preferably twice, in each period of twelve months.

 [> See our website for Fire Safety Training Courses](#)

## Index

1 - The main causes of fire in the workplace	P 4
2 - Fire prevention	P 5
3 - Fire spread	P 6
4 - Portable fire extinguishers	P 7, 8, 9
5 - What to do in the event of a fire	P 10
6 - Fire action notices	P 10
7 - Fire marshals	P 11
8 - Fire drills	P 11
9 - Fire safety checks	P 12
10 - Fire Risk Assessments	P 12
11 - Responsible person	P 13
12 - Questionnaire	P 14
12 - Record	P 15

# 1 - The main causes of fire in the workplace

## Arson



Arson is a major cause of fire to business premises. Either through a grievance or mischief, the effects on a business can be devastating.

Reduce the risk by:

- Protecting letterboxes and outside bins
- Removing/relocating/securing rubbish bins, pallets, etc.
- Securing building perimeters.

## Contractors



Hot work arises from construction or maintenance activities which may generate sparks, heat or flame which can cause a fire.

Reduce the risk by:

- Identify all hot work
- Only permit hot work if essential
- Use a hot work permit system
- Use a recommended / approved contractor

## Electrical equipment



Poorly maintained or misused equipment can cause fires.

Reduce the risk by:

- Have electrical equipment PAT tested
- Ensure all equipment is regularly serviced
- Ensure staff are trained on how to use equipment
- Reduce the use of portable electrical heaters
- Switch off and unplug unused devices

## Smoking



Smoking is a potential fire hazard.

Reduce the risk by:

- Ensure staff smoke only in designated areas away from the building
- Provide ash bins for safe disposal

## Clutter and combustables



A lack of basic cleaning, untidyness and the storage of combustables such as paper, wood or cardboard can be a major contributor to the spread of fire.

Reduce the risk by:

- Regular cleaning and de-cluttering
- Ensure combustables are stored off site or in locked containers

## DID YOU KNOW?

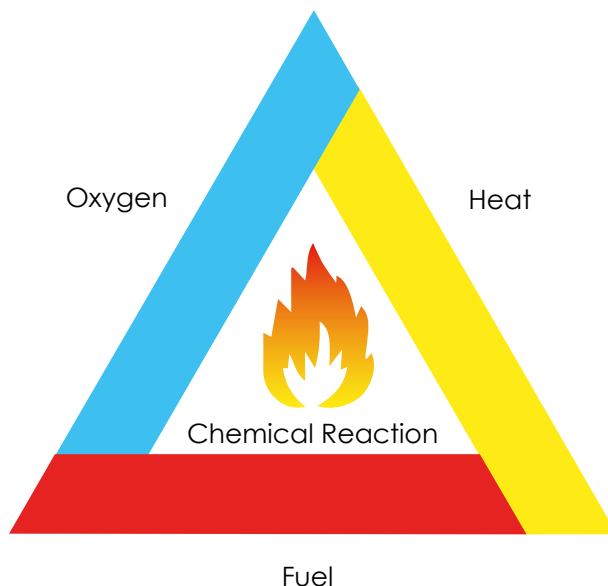
- Most fires break out at night when everyone has gone home, but often start during work hours.
- Many serious fires occur during building or maintenance work
- Many fires are a result of an electrical fault or misuse
- Fire drills should be carried out at regular intervals (minimum 6 months)
- Vapours from flammable liquids are usually heavier than air and can travel long distances.
- Storage areas are more prone to big fires than production areas.
- Smoke is unburnt vapours

## 2 - Fire prevention

- Reduce the sources of ignition
- Minimise potential fuel for fire
- Reduce sources of oxygen
- Ensure fire doors are not left open and are not blocked
- Report any faults with fire doors such as doors not closing

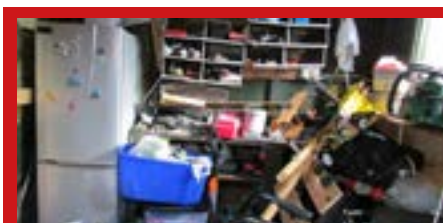
### The fire triangle

In order for a fire to occur, three elements are required: oxygen, fuel and heat. If you remove one of the elements the fire will go out



Remember the fire triangle, keep fuel and heat apart as it could save property, injuries and most importantly lives.

### Sources of fuel



Clutter / Untidiness



Flammable liquids



Computers



Smoking



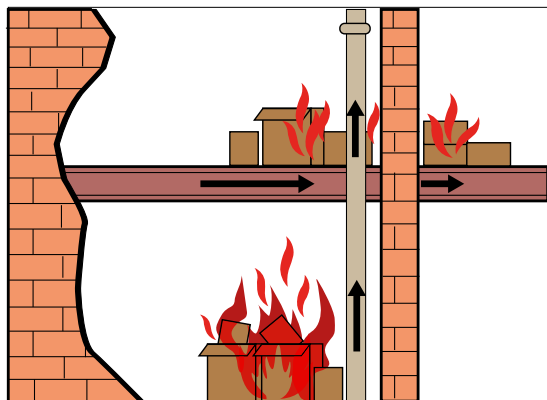
Electrical fittings



Hazardous substances

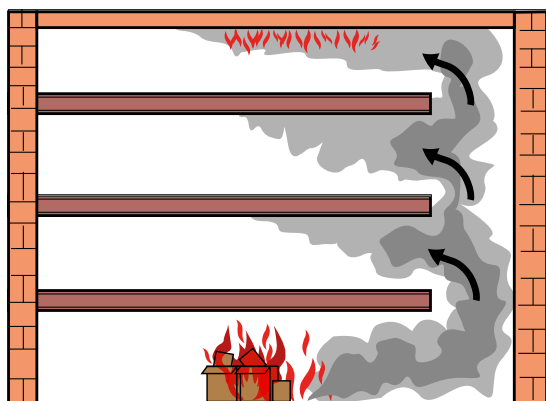
### 3 - Fire spread

#### Conduction



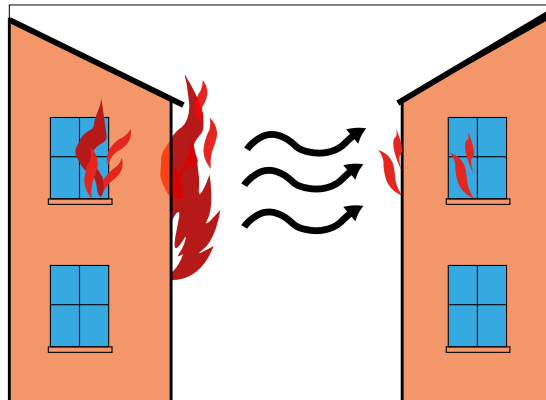
Conduction describes the movement of heat through a material e.g if a metal spoon is held in a flame the handle will get hot quite quickly, because most metals are good conductors of heat. Copper pipes for example are especially good at conducting heat. A fire in one compartment can easily be spread to adjacent compartments by heat conducted via metal pipes or metal frames used in the building construction.

#### Convection



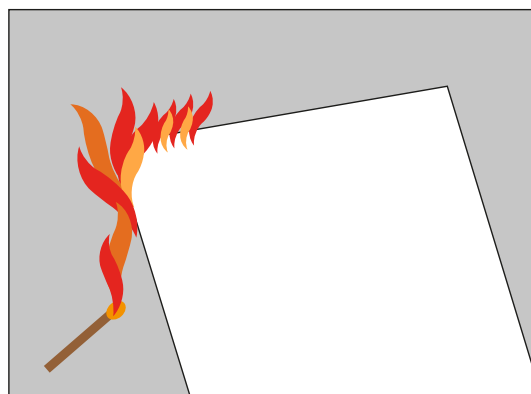
The principle that hot air rises and cold air sinks. Hot gases are generated by the fire rise straight up from the fire. Inside a building these gases will hit the ceiling. When these gases touch any combustible material they may heat that material up sufficiently so that it bursts into flames. Outdoors these convection currents will contain burning embers that are carried in the currents until the air cools and they drop to the ground. This is a common way for forest fires to travel and jump obstacles such as roads.

#### Radiation



Radiation is the transfer of heat energy that heats solids and liquids (but not gases.) Heat from a fire in a building may be radiated to an adjacent building by passing through windows and igniting any combustible materials in its path. If unchecked, radiated heat will enable a fire to spread rapidly from building to building, as substances such as glass have little resistance to radiated heat.

#### Direction



The simplest method of fire spread, where a flame front moves along or through the burning material. For example, if the corner of a piece of paper catches fire, the flame will spread across the paper.

## 4 - Portable fire extinguishers

### Introduction

Fire extinguishers are an extremely effective item of fire fighting equipment, but only if you know how to use them properly. There really is no substitute for hands-on training!





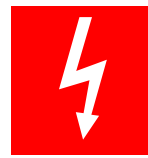

If you own a business, when periodic discharge tests are due or you are replacing your old but safe fire extinguishers with new ones, consider using the older extinguishers for invaluable hands-on training for your staff.

### IF IN DOUBT GET OUT

When considering whether to tackle a small fire yourself if you discover one, always bear in mind the golden rule of fire safety; if in doubt, get out, stay out and call the Fire Brigade immediately.

### Fire classification

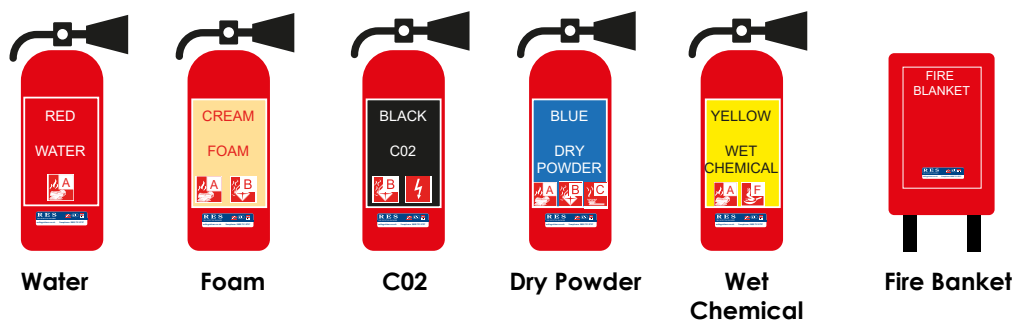
In order to select the correct fire extinguisher for your premises you first need to identify from which class of fire you are at most risk. Fires are differentiated into Classes A, B, C, D, Electrical, and F. The following is a brief overview of each class.

Type of fire extinguishers						
	Class A Fire involving solids (wood, paper, plastics, etc.. usually of organic nature)	Class B Fires involving liquids or liquefying solids ( petrol, oil, paint, fat, wax etc)	Class C Fires involving gases (liquefied petroleum gas, natural gas, acetylene, etc)	Class D Fires involving metals (sodium, magnesium and many metal powders, etc)	Electrical Hazards Although not a true class of fire, we should also consider fires in electrical equipment.	Class F Fires involving cooking fats/oils.
Water	●					
Carbon Dioxide		●			●	
Foam	●	●				
Dry powder	●	●	●	●	●	
Fire Blanket						●
Wet Chemical	●					●

## 4 - Portable fire extinguishers

### Identification

Fire extinguisher types are colour-coded for ease of identification. British Standards EN3 legislation requires 90% of each fire extinguisher to be red, with a panel on the side showing the identifying colour.




### How to use a fire Extinguisher


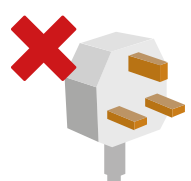


- 1 Remove the safety pin
- 2 Aim the discharge nozzle at the base of the fire
- 3 Depress the operating lever
- 4 Sweep from side to side

#### Water

Used for **class A** fire risks such as wood, paper, material and cloth.

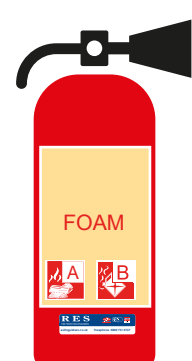


**DO NOT USE** if fire involves flammable liquids, fat, gas, electricity.



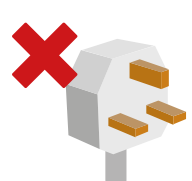




#### Foam

Used for **class A** fire risks such as wood, paper, material and cloth and **class B** fire risks – flammable liquids such as – petrol, spirits and diesel.



**DO NOT USE** Do not use if electricity is present.





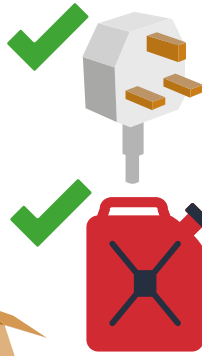
## 4 - Portable fire extinguishers

### C02



Used for **class B** fire risks – flammable liquids such as petrol, spirits and diesel and also Electrical hazards

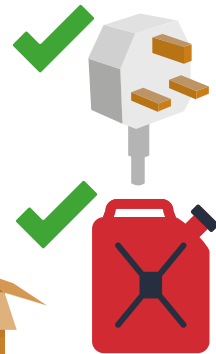
**DO NOT USE**  
In confined spaces



### Dry Powder



Used for **class A** fires (wood, paper, material, cloth, etc), **class B** (flammable liquids such as petrol, spirits, diesel), **class C** (flammable gas) and also **electrical** hazards.



### Wet Chemical



Used specifically for Fire Risk **class F** – deep fat cooking fires.



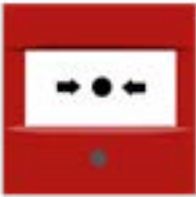




### Fire Blanket



Commonly used for chip pan fires and toasters (kitchen fire risks) but also used for waste bins and in laboratories.



## 5 - What to do in the event of a fire

<p><b>Discovering a fire</b></p> <p>On seeing fire or smoke</p> <p>Activate the nearest fire alarm call point by breaking the glass (if alarm not already sounding)</p> <p><b>If safe to do so</b> make an attempt to extinguish the fire with the correct type of extinguisher <b>ONLY IF TRAINED</b></p> <p>CALL _____ (Details per customer)</p> <p>Leave by the nearest Fire Exit or Exit route. Do not stop to collect personal belongings. Never use a lift.</p> <p>Report to your fire assembly point.</p> <p>Remember: Your safety is the top priority.</p>	  
<p><b>On hearing the alarm</b></p> <p>Leave by the nearest Fire Exit or Exit route. Do not stop to collect personal belongings. Never use a lift.</p> <p>Report to your fire assembly point.</p> <p>Remember: Your safety is the top priority.</p>	
<p><b>If trapped by fire</b></p> <ul style="list-style-type: none"> <li>Close the fire door to the room</li> <li>Find a window, open or break it to summon attention</li> <li>Keep down below the smoke while awaiting rescue</li> </ul>	




## 6 - Fire action notices









**Residents Fire Action Notice**

**WHAT TO DO IN THE EVENT OF A FIRE:**


-  Immediately leave the area the fire is in, making certain the doors are closed firmly behind you to prevent smoke and fire spreading throughout the building.
-  To raise the alarm shout, FIRE, FIRE, FIRE knocking on doors to warn other residents to leave the building.
-  Call the Fire Service by dialing 999 or 112.

 If you hear the alarm from communal smoke detectors, leave the building, knock on doors of other residents so that they can leave as well.

-  Leave the building by the nearest exit.
-  Go to your assembly point and await the Fire Service.  
Your assembly point is: **A safe distance of 100 metres away**

 **DO NOT stop to collect personal belongings.**  
**DO NOT take risks.**  
**DO NOT use the lifts.**  
**DO NOT re-enter until told it is safe to do so.**

Please also call the managing agents



## 7 - Fire marshals

### Duties

Familiarise yourself with the Fire protection equipment and procedures on site

- **Fire Points**
  - fire alarm manual call points
  - mandatory fire action notices
  - extinguishers
- **Fire Alarm System**
  - smoke and heat detection
  - smoke vents
  - delayed alarm (where applicable)
- Emergency Lighting
- Dry rises and Hydrants
- Fire Safety Signage
- Inform Staff of the Emergency Plan
- Staff fire Safety Training

### Evacuation

On hearing the evacuation alarm each Fire Marshal, if safe to do so will check the area which they are responsible to ensure it has been evacuated and report to the emergency co-ordinator for further instructions from the fire officer.

N.B Where safe to do so the fire marshals with assistance having been appropriately trained will aid in extinguishing a small fire.

Two types of Fire Evacuation Systems

- **Roll Call system**—based on checking that everyone in the building has reached a place of ultimate safety.
- **Fire Marshal System**—based on splitting the building into small manageable areas.
  - > Clear your area of all personnel effects
  - > Direct people to the nearest exits
  - > Close all doors and windows
  - > Report to the site fire officer at the assembly point
  - > Ensure no-one re-enters the building until it is safe to do so
  - > Pro-active approach - Fire marshals identify dangers and problems arising during, not after evacuation.

## 8 - Fire drills

### Regular safety checks

- Daily, weekly, monthly checks to be completed
- Report your findings - Good or Bad.

See section 8 for more detail.

### Prevention is the best cure

- Keep the workplace clean and tidy—Good Housekeeping
- Safe storage of materials and hazardous substances
- Report all faults
  - > Fire doors
  - > Gaps/Holes
  - > Emergency Lights
  - > Misuse of portable fire equipment
- Ensure staff work safety and obey fire regulations by following daily start of the day checks and close down checks.

### Out of hours inspections (if applicable)

To carry out general fire patrols of site on an hourly basis. These patrols must include the inspection of any on-going hot work permit operations. Actions taken and management actions shall be recorded and submitted to the fire officer (out of hours = 1800-0730hrs weekdays, after 1300hrs Saturday)

Areas must be re-inspected one hour after hot works have ceased.

N.B The first out of hours inspection MUST include a physical check of all offices, welfare and canteen areas.

### Responsibilities of a Fire Marshal

- Ensure all escape routes are clear at all times
- Ensure all fire safety signs are visible
- Note and report hazards
- Take the correct action in the event of a fire



## 9 - Fire safety checks

Article 17 of the The Regulatory Reform (Fire Safety) Order establishes a duty to maintain fire safety within the workplace. To assist in maintaining fire safety, regular inspections should be completed.

Fire marshals appointed from staff should carry out a fire inspection. They should record any findings, positive or negative, in writing – preferably on a form designed for that purpose. Many organisations devise checklists to prompt the fire marshals to consider an appropriate range of fire issues relevant to the work area under consideration.

By completing the inspection form and summary sheets, fire corrective actions and recommendations will be highlighted. Such documentation, together with any corrective action carried out will create an auditable system, which will demonstrate management control of fire safety. A copy of inspection forms should be forwarded to the Fire Safety Manager within a formal agreed timescale to enable the Fire Safety Manager to monitor performance and progress on outstanding actions.

A Fire Marshal or other appointed person for each area should make an inspection at intervals depending on the fire risks in the workplace – weekly, monthly, quarterly. The inspection will seek to include issues such as:

- **Goods neatly stored so as not to impede fire fighting**
- **Clear spaces around stacks of stored materials**
- **Gangways kept unobstructed**
- **No non-essential storage in work areas**
- **Materials a safe distance from fire fittings**
- **'Hot work' being appropriately controlled**
- **Company smoking rules known and enforced**

The process of undertaking fire safety inspections should:

- **Help prevent fires in the workplace**
- **Ensure escape routes are clear of obstruction**
- **Monitor fire safety standards**
- **Keep staff aware of fire safety issues**
- **Reinforce the role of fire marshals**

An inspection checklist and report form is a useful control technique to ensure fire safety conditions are identified through inspection and that any actions necessary are collated and rectified. Records should be retained for an agreed period to enable an audit trail to be maintained.



## 10 - Fire risk assessment

Regulatory Reform Fire Safety Order 2005 from 1st October 2006 **places responsibility of a premises fire safety on the "Responsible Person"**

The responsible person then may instruct or take advice from a "competent person" to complete a Fire Risk Assessment which then must be regularly reviewed and reviewed at least annually by a competent person.

Daily responsibilities may be passed on to the Fire Marshalls or site Fire Safety Officers to ensure the Fire Risk Assessment is maintained and improved upon at all times.

A competent person/company may be employed for weekly alarm and monthly emergency light testing and should be employed for the routine maintenance of all fire protection equipment on site.

- **Familiarise yourself with your premises Fire Risk Assessment.**
- **Ensure all regular fire safety checks are completed.**
- **Ensure records are kept and the Fire log book is maintained.**

## 11 - Responsible person

The Regulatory Reform (Fire Safety) Order took effect from 1 October 2006, and changed the legal framework for property owners and managers. By law, every non-domestic building must have a "Responsible Person" assigned to the building.

The duties placed on the 'responsible person' under the Order are:

- Carry out a Fire Risk Assessment and identify possible hazards and risks
  - Take general fire precautions
  - Principles of fire prevention are to be applied
  - Fire safety arrangements, fire safety policy and procedures
  - Take account of those particularly at risk, i.e. very young people; those with special needs or disabilities; and people working with dangerous substances such as flammable liquids
  - Provide suitable arrangements to warn people of a fire in the building such as, a Fire Detection and Alarm (FD&A) system.
  - Eliminate or reduce risk from dangerous substances (chemicals etc.)
  - Additional emergency measures in respect of dangerous substances
  - Provide adequate means of escape in the case of a fire such as sufficient and suitable fire exits; fire doors and compartments; signs, notices and emergency lighting
  - Take measures for fire fighting e.g. fire extinguishers
  - An effective fire emergency plan to be followed in the event of a fire
  - Maintenance of all fire safety systems and equipment
  - Ensure capabilities of employees who are given special tasks in terms of fire safety and fire procedures, and provide training to all employees and others who may need it
  - Regularly review all these processes and amend if necessary"
-

# 12 - Questionnaire

Name : .....

Department: .....

Date: .....

1. Which side of the fire triangle does CO2 (Carbon Dioxide) remove?

- Heat
- Fuel
- Oxygen
- Fuel and Oxygen

3. If the fire continues to grow despite your efforts you should?

- Get another extinguisher
- Get closer to the fire
- Leave the area, closing doors & windows as you go
- Get some help

5. What must be your main consideration when you use WATER on 'live'

- Someone knows what you are doing
- That you have more than 1 extinguisher
- Personal Safety & the safety of others
- Having the correct extinguisher

7. How long does a WATER extinguisher last (approx)?

- 30 seconds
- 1 minute
- 2 minutes
- 3 minutes

9. Which side(s) of the fire triangle does the Dry Powder extinguisher remove ?

- Heat
- Fuel
- Oxygen
- All of the above

2. Tick the icons that you will find on a FOAM fire extinguisher?



4. What colour is used to identify the FOAM extinguisher?

- Blue
- Red
- Black
- Cream

6. What is Likely to happen if you use WATER on 'live' electrical equipment?

.....  
.....  
.....  
.....  
.....

8. Where should you fight a fire that is growing upwards?

- At the top
- At the bottom
- In the middle
- It doesn't matter

10. Which extinguisher(s) are suitable for fighting fires that involve flammable liquids?

- Water
- Foam
- CO2
- Dry Powder





**Call:** 0800 731 0727

**Email:** [sales@resfire.co.uk](mailto:sales@resfire.co.uk)

**Web:** [resfire.co.uk](http://resfire.co.uk)

**Address:**

RES, 14 Cremyll Road,  
Reading, Berkshire, RG1 8NQ

**Office Hours:**

Mon to Fri: 8am – 5pm

**Outside Office Hours:**

Our engineers are on call 24/7.

**Protecting People and Property Since 1985**