

Fire Extinguishers Explained

Types of Fires

CLASS A



Solid material fires that burn materials such as paper, wood or plastic.

CLASS B



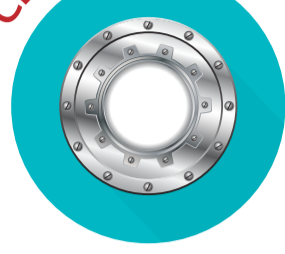
Fires that involve flammable liquids, including paraffin, petrol and oil.

CLASS C



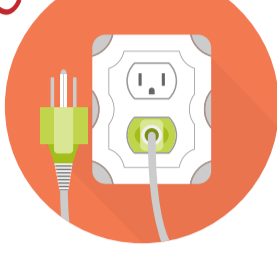
These flames burn on flammable gases such as propane, butane and methane.

CLASS D



Are fires that ignite with metals such as aluminium, magnesium or titanium.

CLASS E



Caused by electricity, or involve electrical equipment and apparatus.

CLASS F



These fires are ignited with oils or cooking fat.

Types of Fire Extinguishers



Foam Fire Extinguisher

Used for : Classes A and B
Dangerous if used for : Class F

How it works: the foam released by this extinguisher seals the surface of the burning material, preventing any stray materials from escaping and igniting elsewhere, as well as ultimately suffocating the fire. This extinguisher can be used on solid materials and flammable liquids such as paraffin and petrol (Classes A and B), but not for chip and pan fires (Class F).

Water Fire Extinguisher

Used for: Class A
Dangerous if used for: Classes E and F

How it works: the water soaks the burning materials, such as paper, wood or fabric (Class A) and cools them down, completely putting out the fire. However, these extinguishers are very dangerous to use on oil and fat fires as well as electrical fires (Classes E and F).



Carbon Dioxide Fire Extinguisher

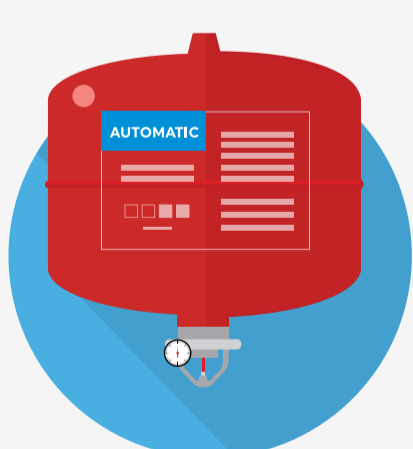
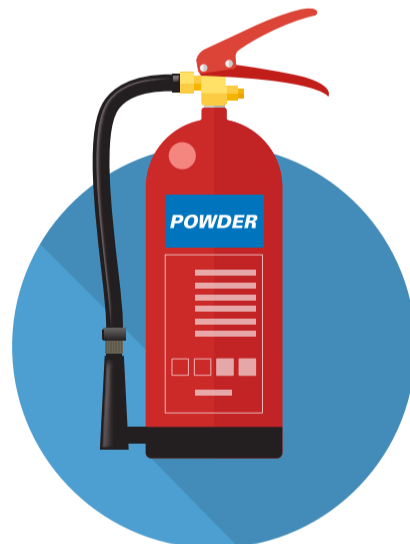
Used for : Classes B and E
Dangerous if used for : Class A and C

How it works: the carbon dioxide cuts off the oxygen supply to the fire, which smothers the blaze and puts it out. They are ideal for electrical fires and flammable liquids such as petrol and paraffin (Classes B and E), but are dangerous for use on solid materials and flammable gases including methane, propane or butane (Classes A and C).

Powder Fire Extinguisher

Used for: Classes A, B, C, and E.
Specialist types available for Class D.
Dangerous if used for: Class F

How it works: a powder is released and acts as a blanket which suffocates and cools the flames. The powder also prevents the flames from spreading, making it effective for most fire types including solid materials, flammable liquids, gases and electrical equipment (Classes A, B, C and E), however it's not suitable for oil or pan fat fires (Class F). Specialist mixtures of powder extinguishers are available for fires involving metals (Class D).



Automatic Fire Extinguisher

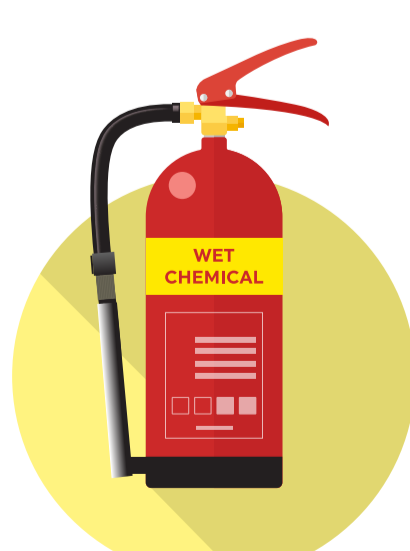
Used for: Classes A, B, C and E
Dangerous if used for: Class F

How it works: automatic fire extinguishers are ideal for locations where manual operation is not possible, or immediate activation is of utmost priority. They release an extinguishing agent when fire is detected, making them ideal for blazes involving solid materials, flammable liquids and gases as well as electrical fires (Classes A, B, C and E). However, they can't be used in areas with a high risk of fire ignited by oils or fats (Class F).

Wet Chemical Fire Extinguisher

Used for: Class F
Dangerous if used for: Classes B, C, D and E

How it works: these extinguishers are specially formulated to tackle blazes involving oils and fats, with the chemicals reacting to create a fine film, suffocating the blaze. These extinguishers are perfect for use in kitchens with a high risk of fires involving cooking oils or fats (Class F), however they should not be used for any liquid, gas, metal or electrical fires (Classes B through to E).



City Fire Protection are leading providers of fire safety equipment and training for businesses around the country. For more information, please get in touch with us today and we'll be more than happy to help you.